Company	Experience	Year
[24]7 iLabs, Bangalore	[24]7 Innovation Labs, Bangalore is focused on providing software product solutions to its clients in the customer service area. The offers projects in product engineering, data sciences and service delivery. Pursuing my PS2 at [24]7 ILabs, Bangalore was a major learning experience and it greatly enhanced my technical as well as interpersonal skills. The span of five and a half months was completely devoted to the organization, facing workplace challenges every day and getting a hands-on experience of the corporate world. With an employee friendly work culture, it was quite easy to approach anyone and ask for help. It was a completely different experience altogether getting to know about the working of an organization, arrangement of departments and division of power within the organization. Industry exposure made me explore various career paths and acquainted me with my interests. PS2 was an opportunity to practically apply all the things learnt in class. The transition from academics to industry was the most difficult challenge. Working on an existing real product is quite different from the projects completed as a part of academic curriculum. I learnt to adapt to sudden market shifts and technology changes and also learnt how industry responds to such sudden transformations essionally. Internship improved my technical, soft, observation and leadership skills and boasted my confidence levels. The active interaction with the company employees not only from my team but also from other departments helped me learn more about other project fields and about the various cycles of development and delivery of a software product. Regular team outings enhanced team bonding and informal lunch discussions with colleagues about recent discoveries in the technical field broadened my knowledge base. I received all the guidance required for the culmination of the project from my manager and mentor. The continuous assistance, appreciation and encouragement received on completion of major tasks kept my spirits high. Regular mee	2015- 16- sem1
Acko	The objective of our project is to conduct various types of analysis on the several departments present at ACKO. These departments include marketing where we can analyze which models are attracting the most premium customers and planning the correct marketing strategy to attract more customers. Another department is claims, where we can figure out which aspect of claims is taking the most time, and try to reduce it to speed up other parts of the process. Claims represent the most important part of an insurance business, as it is essential look on a company's customer satisfaction rate. For any service company, the customer satisfaction is the most key aspect. Tool used (Development tools - H/w, S/w): SQL, Tableau, Java Objectives of the project: Improve Productivity Major Learning Outcomes: Data Analytics Faculty Student	2018- 19- sem1
Adaequre, Hyderabad	Domain: Computer Science Student	2016- 17- sem1
Adaequre, Hyderabad	Created an Image Upload tool that helped upload images to the Amazon Web Services storage cloud. Worked on setting up Google Analytics for the company's website and setting up enhanced ecommerce plugin of Google Analytics. Tools used (Development tools - H/w, S/w): Desktop Objectives of the project: To create a tool that could help upload images to Amazon cloud and could be accessed easily via a link generated by Amazon CDN to access the images for the company's ecommerce website. Google analytics tracking to keep track of the performance of various products offered by the company's website. Outcomes of the project: AWS tool was used by the company employees. Google Analytics is yet to be implemented Major Learning Outcomes: Learned java, design patterns, javascript, servelets, restful APIs. Brief Description of working environment, expectations from the company: The company had a jovial working environment, with strictly professional guidelines. The company is aggressively expanding and hiring, so it is bound to move forward. Student	2016- 17- sem1
Aditya Birla - Data and Analytics	Work done included data curation, text analytics and research work. Tool used (Development tools - H/w, S/w): Jupyter Notebook- Python, Microsoft Excel Objectives of the project: To help the department and hence the Aditya Birla Group to be able to leverage data to drive business decisions. Major Learning Outcomes: Learned about working process in corporate sector, working in teams Academic courses relevant to the project: Machine Learning	2018- 19- sem1

Company	Experience	Year
Aditya Birla - Data and Analytics	Worked on app development, web development and Video analytics Tool used (Development tools - H/w, S/w): Python, Flask, HTML, CSS JavaScript, PostgreSQL, Amazon Web services, AJAX, Node.js, Keras, TensorFlow Major Learning Outcome: Python, Flask, HTML, CSS JavaScript, PostgreSQL, Amazon Web services, AJAX, Node.js, Keras, TensorFlow Academic courses relevant to the project: NNFL Artificial Intelligence computer Networks data Mining	2018- 19- sem1
Aditya Birla Insulators, Halol	Title: Agitator design and ball mill standardization. Work involves analyzing the trend in particle size distribution in the ceramic slurry and how ball mill grinding time and agitator mixing time affects it.  Agitator design was to be made and mixing simulated using simulation software. Tool used (Development tools - H/w, S/w): Minitab 17 and MS Excel 19 for data analysis Objectives of the project: Standardize the design of an agitator and study how ball milling time affects ceramic slurry Major Learning Outcomes: Got a major insight into CFD Brief Description of working environment, expectations from the company: The working environment is good and demanding, disciplined and focused work is expected. Academic courses relevant to the project: Fluid Dynamics, Mechanics of Solids, FEA, Engineering Mathematics Company Private Limited, Mumbai	2018- 19- sem1
Aditya Birla Science & Technology	To develop a device for the measurement of lustre of dope dyed viscose fibers that is capable of differentiating between dope dyed and post dyed viscose fibers/fabrics. Tool used (Development tools - H/w, S/w): Hardware, Concept of Optics, LED Light, Curved Lenses, DSLR Camera Major Learning Outcomes: Viscose fiber and different processes involved in making of it, i.e. Viscose Process and how Optics and its arrangement can be used to differentiate lustre property among different samples of fibers. Brief Description of working environment, expectations from the company: Working environment was very good. Mentor allotted for the project was very supportive and experienced in his respective field. Got to learn a lot of things from him. Each & every person in the team was very helpful. Since it's a Research & Development center, working lifestyle is little bit slow. One major feedback, for interns, ABSTCPL should provide the stipend on time. Academic courses relevant to the project: Polymer Technology Short Summary of work done during PS-II The work was based on building a model that would predict the daily current efficiency of an aluminum smelter which would be used to integrate in the future in the plants located all across the country. Tool used (Development tools - H/w, S/w): Python(Pandas, sklearn, numpy), MS Excel(VBA) Objectives of the project: Predictive Modeling Major Learning Outcomes: Hands on Machine Learning Details of Papers/patents: Working on releasing a paper Brief Description of working environment, expectations from the company: The environment was very relaxed, they provide deadlines based on your limitations. The mentors and the managers are very helpful with the project. They try their best to accommodate you into the office; the travel to the office and food is provided at the office canteen. Academic courses relevant to the project: Minor in Data Science	2018- 19- sem1
Adobe Inc, Bangalore	The project involved development of a framework for rendering glTF assets, a file format for 3D objects, in Augmented Reality. While Android already has support for glTF assets, Apple does not. Hence the main focus was to develop this framework for Apple Devices. Tool used (Development tools - H/w, S/w):  Objective-C, SceneKit, ARKit, Java Objectives of the project: Rendering glTF assets in Augmented Reality Major Learning Outcomes: Product Development basics, How industry standard products are made, App development, Computer Graphics, OOP implementation Brief Description of working environment, expectations from the company: The working environment was good, with all the employees very helpful. There is no fixed working hours, but the company expects everyone to give their maximum effort. Academic courses relevant to the project: OOP, DSA	2018- 19- sem1
Adobe Inc, Bangalore	Integration of a web service with Adobe software and explored a couple of existing projects in GitHub Tool used (Development tools - H/w, S/w): Adobe Animate-sw Objectives of the project: Experimented if existing projects efficiency can be improved and integration of that with Adobe animate software Major Learning Outcomes: Explored two new ml frameworks(caffe, pytorch) and about Animate software Brief Description of working environment, expectations from the company: Friendly and professional at the same time. I got enough support from mentors and team members Academic courses relevant to the project: Machine Learning, Networks Name: Vidit Bhat (2015A7PS0098P)	2018- 19- sem1

Company	Experience	Year
Adobe Inc, Bangalore	Adobe Creative Cloud is a set of applications and services from Adobe Systems that gives subscribers access to a collection of software used for graphic design, video editing, web development, photography, along with a set of mobile applications and also some optional cloud services. The Adobe Creative Cloud desktop application keeps all the assets in sync. Any additions, modifications, or deletions are reflected on all connected computers and devices. For example, if you upload an .ai asset using the Your Work section of Creative Cloud, it is automatically downloaded on all connected computers. Currently, when an asset is modified either on a local or a remote server, the client ends up uploading/downloading the whole file again. This is because there is no way to determine the delta changes between the updated file and existing file. To avoid this, both client and server should determine delta changes. There are many algorithms, which can determine the delta changes, out of which RSync is most popular. Tool used (Development tools - H/w, S/w): Intellij, VMware, Postman, AWS Objectives of the project: To optimize upload and download flow in the existing product Major Learning Outcomes: AWS, Git, API designing, OOP Academic courses relevant to the project: NA	2018- 19- sem1
Adobe Systems , Bangalore	This Project report is about analysing and estimation of object homogeneous defocus map of an image and building automatic crop for export workflow using image processing and Machine learning techniques. In our first project, we first tried finding defocus map using basic image processing techniques such as edge detection using Sobel operator and Laplacian operator continued with some advanced image processing techniques such as canny edge detector. Since plain edge detection techniques are not giving good results, we turned to machine learning models such as holistic edge detector. Edge detectors are giving good results when the defocused part of the image has very less variation in intensities. As we know that this will not be the case for every image, we want to find defocus map by finding the function/ kernel that is causing the defocus. And also, we are using some deep learning models ( advanced models of CNNs) to find the defocus map. For the second project, we built a crop tool that automatically crops an image with the user given aspect ratio while maintaining the image composition and aesthetics. We combined a neural network architecture and an optimisation module to maintain the image composition and aesthetics. This tool is designed to combine with export workflow of LrClassic so that it would significantly decrease the time spent by user while exporting batches of images Tool used (Development tools - H/w, S/w): Jupyter Notebook, Lightroom, SQLite,Plotly Objectives of the project: Object Homogeneous Defocus Map Estimation and Automatic Crop for Export Workflow Major Learning Outcomes: I had to explore different architectures for the model to recognize the region of interest and experiment on it. There were a few mathematical challenges while optimizing the model to process the images. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DIP, ML	2019- 20- sem1
Adobe Systems , Bangalore	Worked on two different projects (together with one more intern) in the domain of Image Processing. The projects involved implementing two experimental features in Adobe's photo-editing android application called Adobe Lightroom. The ideas for the projects were suggested by the mentors, which we had to expand upon and implement. Tool used (Development tools - H/w, S/w): Android Studio, Git, Jupyter Notebooks Objectives of the project: To create working implementations of the two features, alongwith the UI, which were initially just ideas and create working demos for them. Major Learning Outcomes: Android Development, Machine Learning, Collaboration of work through Git Details of Papers/patents: Obtained a patent for the first project. Brief Description of working environment, expectations from the company: The work here is quite good if you are into things like Image Processing, Machine Learning. A lot of cuttingedge research is continuously going on in most of the teams with many people applying for patents each month. P.S. A big plus if you use Adobe products in your day-to-day life as you'll get to see the research and effort that goes behind them. Academic courses relevant to the project: Object Oriented Programming, Networking, Software Development for Portable Devices, Machine Learning courses Student	2019- 20- sem1
Adobe Systems , Noida	I was in the Media and Data Science Research Lab.My topic of research was NLP on Big Code.During the entire duration I was involved in two projects. First project was to improve the current Bug detection techniques, I made a neural network model to capture the semantics of code to predict, localize and repair errors that might appear during run-time. It was a challenging task with little or no data available. The approach I took was making synthetic bugs to accomplish the given task. The other task was to improve the embedding of code for various downstream tasks like code clone detection and code classification. Tool used (Development tools - H/w, S/w): Python, Pytorch and various other Machine learning utilities Objectives of the project: Bug Prediction and Making context rich code embedding Major Learning Outcomes: Exposure to research and deep learning Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Machine Learning, NNFI, Compilers, DSA Student	2019- 20- sem1

Company	Experience	Year
Adobe, Noida	My work revolved around iOS app development. My work was primarily in Objective-C language. I developed UI for different image editing features of the product. Later, I was given work on redesign of code architecture, which involved knowledge of design patterns. Tool used (Development tools - H/w, S/w): Xcode, Objective C Objectives of the project: iOS App Development Major Learning Outcomes: Object Oriented Programming, Design Patterns Academic courses relevant to the project: Object Oriented Programming	2018- 19- sem1
Adobe, Noida	I was assigned to a different team than the other interns and was the only intern in my team for the semester. My work was in the field of Reinforcement Learning mainly. I had to help develop RL algorithms for one of their marketing products. It was a very good learning experience. I learnt to read many papers and implement them. I was given as much resource as I wanted to do my necessary work. Tool used (Development tools - H/w, S/w): TensorFlow Objectives of the project: Create Reinforcement Learning models for campaigning strategies Major Learning Outcomes: Learnt Tensor flow, Learnt latest state of the art RL algorithms, Learnt about systems in terms of constraints. Brief Description of working environment, expectations from the company: Great working environment, good work life balance, very friendly and helpful team, direct communication with manager, Office had all facilities which could be used for free, flexible timings. Academic courses relevant to the project: Artificial Intelligence, Machine Learning, Neural Networks	2018- 19- sem1
Adobe, Noida	Developing features on collage side of Photoshop Express iOS Tool used (Development tools - H/w, S/w): XCode, iPad, iPhone, SourceTree Objectives of the project: Deliver features in a fast paced environment Major Learning Outcomes: Design and Development of Mobile Applications Academic courses relevant to the project: Software Engineering, Human Computer Interaction Faculty Student	2018- 19- sem1
Akira Consultancy Private Limited, Bangalore	PS-II provided me an opportunity to put my theoretical knowledge into practice. It gave an industrial exposure and an experience of the real world scenario suitable for my technical background. After having spent duration of five and a half months at my PS - II station, Akira Consultancy Pvt. Ltd., I can positively say that I have gained a lot of confidence and expertise to face the challenges in the industrial world. At Akira, my project is on Data warehousing and analytics. We gather data regarding the sales from our clients' servers, process the data, cleanse it, and feed it into our databases which were designed based on requirements, this is done using software like SQL, Management studio etc., Data in those databases won't be able to express much unless reports are constructed. Only then data can be visualized by the individual. Once the reports are build, using Qlikview, clients are given access to them, so that they can take executive decisions based on their sales performances. I learnt some cutting edge technologies as a part of this project which will definitely help me in my future prospects. Apart from my core discipline knowledge, I gained knowledge regarding few software like SQL, Qlikviewetc, which are used even in Chemical engineering (experimental data) and Biological Sciences (genetics) in handling huge data. Not just the theoretical knowledge, but a hands-on experience. Apart from the project PS-II also gives us industrial exposure. I learnt how coding standards are in an industrial environment. Modulation of the code is of utmost importance. This is because a major concern of the institutions is scalability of the code. The code should remain usable even after a particular person is off the project. It should be understandable to everyone. Thus, variable names, packages, documentation etc. need to follow certain rules as specified by the company. In an industrial environment, essional conduct is also of a lot of importance. PS-II gave me an exposure to this area as well. Addressing your col	2015- 16- sem1
AlmaConnect , Gurgaon	Handled operations and product management and went on to be a part of the growth story of the company. Tool used (Development tools - H/w, S/w): Used Amplitude, Google Analytics, Metabase dashboards, Freshdesk CRM and advanced Excel. Objectives of the project: Understand the day to day working of the company and craft growth strategy and devise scalable planning. Major Learning Outcomes: Learnt the day to day workings of a startup. Understood activities concerning investor sentiment, effective marketing/advertising campaigns, running operations frameworks and making sense out of user data to convert them into design solutions. Details of Papers/patents: Brief Description of working environment, expectations from the company: Absolutely great working environment. Incredibly Agile. Academic courses relevant to the project: None	2019- 20- sem1

Company	Experience	Year
AlmaConnect , Gurgaon	Worked as business deveelopement and operations intern. Managing daily tasks of the company, optimizing them so as to reach the end goal Tool used (Development tools - H/w, S/w): MS- Excel Objectives of the project: To find a way to build engagement on the platform Major Learning Outcomes: Work of a Business Developement and Operations person	2019- 20- sem1
AlmaConnect , Gurgaon	To develop and maintain the AlmaConnect website. The technologies used were Ruby on Rails for backend and AngularJS for front-end. ReactJS for building static websites for static websites. Tool used (Development tools - H/w, S/w): Sublime Text, Ruby terminal, JIRA Objectives of the project: To develop and maintain the AlmaConnect website. Major Learning Outcomes: Ruby on Rails development, AngularJS development, ruby scripting.	2019- 20- sem1
AlmaConnect , Gurgaon	Android and IOS application development using React native framework, I corrected the bugs in the app also including new features on demand from the management, in order to enhance the user experience Tool used (Development tools - H/w, S/w): React Native, Android Studio, XCode, Jira, Mattermost, JavaScript, C++, Java, Firebase Objectives of the project: Objectives of the project were to increase the overall rating of the apps on both playstore and appStore so that both can come at top on searching Major Learning Outcomes: I previously had developed apps with native android studio in java, with react native I had to learn javaScript which is very different from java, also I had to learn about iOS app development using xCode. Details of Papers/patents: NONE Brief Description of working environment, expectations from the company: Working evn is very great, everyone is very cooperative and understanding, company tries to inculcate good habits within us and timings are flexible but they expect the committed work to be done on time, if we are not able to do it they help us find our mistakes and correct them, overall my exp was great Academic courses relevant to the project: NONE Brief write-up on PS-II station: Students were given diverse projects on Machine Learning, Data Mining, NLP, Alexa enhancements etc. Students should be well versed in Python, should have thorough conceptual knowledge and should have the ability to implement what they have learned. Student	2019- 20- sem1
Amazon Business Intelligence, Hyderabad	Student	2017- 18- sem1
Amazon Business Intelligence, Hyderabad	Data Engineer Profile. Had to build tools for analytics team, automate processes and data handling. I also got an opportunity to involve in the analytics part. Tools used (Development tools - H/w, S/w): SQL, Python, Tableau Objectives of the project: Automation, Data handling, performance analysis Outcomes of the project: Automation, Data handling, performance analysis Major Learning Outcomes: Data handling and visualization tools. Brief Description of working environment, expectations from the company: The work hours are flexible and the people are really helpful. But we need to take interest and approach them. No issues if you can complete your deliverables within the timeline. Academic courses relevant to the project: None that i did. Student	2017- 18- sem1
Amazon Development Center , Bangalore	Shopping Aids is a guide that helps customers in completing their shopping mission on Amazon. It achieves this by drawing customer's attention to important features in the shopping funnel at appropriate juncture by rendering an informational tool tip about the feature. Additionally Shopping Aids is being leveraged to improve discovery and adoption of new features. There are many front-end and back-end components which are involved between the scheduling of these Shopping Aids and their final impression on the customers' end device (android app, iOS app and mWeb). This makes it difficult to track the progress of a tip to the customer. It happens the many times the tip is scheduled but due to some reason it not being shown to a customer. There was no infrastructure in place that lets us pin point the failure. Hence the problem statement was to provide a mechanism to monitor the progress of tips. Tool used (Development tools - H/w, S/w): AWS SQS AWS S3 AWS DataPipeline AWS SNS AWS CloudFormation AWS Lambda AWS Athena AWS Glue AWS QuickSight Objectives of the project: Build a system that could track the event cycle of the shopping aid being shown to the customer from the point of page hit to final impression. Major Learning Outcomes: Write clean, maintainable, extensible code. Learnt the AWS stack with CloudFormation. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is not restrictive in the way the there is no compulsory number of working hours as long as the deliverables are being met. The work environment is conducive to learning new technologies and inventing new and better ways to solve problems. Academic courses relevant to the project: DSA OOP Database	2019- 20- sem1

Company	Experience	Year
Amazon Development Center , Bangalore	I was in the Evaluation Platform team who own the platform that does all the risk/fraud evaluation across all of Amazon and its subsidiaries. I worked on two major projects, one which was migrating an old library to a new service and another was on-boarding a new client on the platform. The last task I was given was to write service tests for our system as a part of making the platform more robust. Tool used (Development tools - H/w, S/w): I was given a Macbook Pro 2017, a 35" widescreen monitor and standard mouse and keyboard. Software tools - IntelliJ Idea IDE, Lombok, Spring Framework, rest all are Amazon internal tools Objectives of the project: Project 1 - Migration of an old library inside our platform into a service solely responsible for hosting that library. Project 2 - On-board a new client on the evaluation platform so that a wide variety of new business use cases can be supported. Project Major Learning Outcomes: Industry standard Java Programming, Integration and Unit testing, Software development cycle, Design Patterns, Spring Framework, Agile Software Development, Official Communication, Working in uber tier teams Details of Papers/patents: Academic courses relevant to the project: Object Oriented Programming, Software Engineering, Operating Systems	2019- 20- sem1
Amazon Development Center , Bangalore	FORTRESS Service is the fraud evaluation platform of CTPS. Its internal operations are broadly categorized into Gather, Model, Ruleset and Action stages. VariableComputationOrchestrationLibrary(VCOL) is being introduced inside FORTRESS to enable onboarding of multiple VCSs and it orchestrates variable computation calls based on the given varCategories "namespace" in TEC Config. We want to put guardrails for the variable changes (added or removed) in varCategories. Tool used (Development tools - H/w, S/w):  Java Spring Framework, Scripting, User Experience Objectives of the project: Implementing Guard Rails for Variables inside Transaction Risk Management System Evaluation Configuration & Improvements in Variable Comparison Tool for Variable Migrations Major Learning Outcomes: During the course of these 5 months, there have been numerous things that I have gained working as an SDE Intern for Amazon like Java Programming, SOLID Principles: These include Single Responsibility, Open-Closed Design, Liskov Substitution, Spring Frame Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOP, Database Systems, DSA, Networks, Computer Architecture	2019- 20- sem1
Amazon Development Center , Bangalore	: I worked with the Outbound Marketing Automation Team, which provides a common framework for email, push notifications for marketing purposes, to be used by teams across Amazon. The team also owned what content is selected for the consumer, and how to better consumer experience by sending more relevant messages. In message generation pipeline, we previously had purchase filters which removed previously purchased asins (asin is unique identification id for each product) from the messages. These filters removed the exact purchased asins and their standard variations. In this project, we tried to extend this feature by filtering out asins which are found to be similar to previously purchased asins. We defined a model which measure asin similarity based on asin-text description and images. The implementation was achieved by a spark job, written in Scala which will take notification objects as input, compare them with purchase data for each customer for a fixed number of days and then pass the target-asins through text and image model and finally filter the notifications of target asins which are found to be similar. Tool used (Development tools - H/w, S/w): Apache Spark, AWS resources like EMR, S3, Lambda Objectives of the project: Developing Purchase Halo component which filters notifications from message generation pipeline based on past purchases of customers. Major Learning Outcomes: Big Data manipulation using Spark applications, using AWS resources like S3, EMR, Lambda Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Object Oriented Programming, Database Systems, Machine Learning Student	2019- 20- sem1
Amazon Development Center , Hyderabad	Making of a request editor tool which will help in making testing easier for those API's which require a similar kind of input. Accessibility of a webpage was also a project that i completed Tool used (Development tools - H/w, S/w): Scala, java, jsp, js, aws Objectives of the project: Making Testing easier Major Learning Outcomes: Scala, java, jsp, js, aws Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Object oriented programming and Database	2019- 20- sem1
Amazon Development Center , Hyderabad	Frontend changes in the UI.Integration of service with a third-party tool for logs.Made 2 APIs and a Spring controller for the final project. Tests were written for all classes written. Tool used (Development tools - H/w, S/w): AWS services,Java,python,spring,google guice. Objectives of the project: Mimic service flow to provide non production service API. Major Learning Outcomes: Spring,dependency injection and testing. Details of Papers/patents: Only High level and low level design wiki's. Brief Description of working environment, expectations from the company: Great chance to learn a lot. Great chances of PPO if work is done with complete dedication and without any other commitments literally any other.Slightly hectic for the intern but not really for full-timers. Good company to work for. Growth is quick compared to other companies. Foreign opportunities open up after about 3 years within. Academic courses relevant to the project: OOP(most imp(JAVA)),DSA,DBMS,DAA for SDE profile.	2019- 20- sem1

Company	Experience	Year
Amazon Development Center , Hyderabad	Work was to write restful API to support the backend of the Policy Management System Team. Other than, it involved write code for client to Onboard them to use our product. Project also involved doing load testing to understand the limiting factor for the service and test the performace of the system under stressful conditions. Tool used (Development tools - H/w, S/w): JAX-RS Framework Tps Generator DynamoDB Mockito Junit EC2 with Fargate (on aws) API Gateway VPC Objectives of the project: Writing restful api, performance testing and onboarding of client to use Policy Management System Major Learning Outcomes: Experience in Java, Python, Many services of Aws, importance of stress handling. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OBJECT ORIENTED PROGRAMMING, COMPUTER NETWORKS, OPERATING SYSTEM, DBMS, SOFTWARE ENGINEERING Student	2019- 20- sem1
Amazon Development Center, Bangalore	REST API Development Platform management and Automation Tool Development. Tools used (Development tools - H/w, S/w): Jupyter, Python, Java, Hibernate, Spring, Flask Objectives of the project: REST API Development Platform management and Automation Tool Development. Outcomes of the project: REST API Development Platform management and Automation Tool Development. Major Learning Outcomes: REST API Development Platform management. Understanding Docker and using it. Brief Description of working environment, expectations from the company: Work Environment - Good.	2016- 17- sem1
Amazon Development Center, Bangalore	I created a query service to fetch recharge order details for any recharge done by customer on recharge portal and I created the API for updating KYC information for a customer logging in Amazon Money. Tools used (Development tools - H/w, S/w): AWS Services, Spring Frame work Objectives of the project: 1.Query Service for mobile recharge portal 2. Store KYC information of customer in Amazon Pay. Outcomes of the project: Created query service for mobile recharge plan and created a secure way to store KYC information for any customer using Amazon Pay. Major Learning Outcomes: I learnt about how to write Coral Service, how to use Spring framework and got good knack for java development. I used various AWS Services. Brief Description of working environment, expectations from the company: Working environment is great. Even if I was an intern, my mentors gave me interesting projects to work on and provided all the support and knowledge to me. The team culture is very good at Amazon.	2016- 17- sem1
Amazon Development Center, Bangalore	I was given a chance to work on a machine learning project where I have to classify ASINs to their corresponding subcategories so that our team's warranty widget would display warranties for those ASINs where subcategories were null. Tools used (Development tools - H/w, S/w): Amazon Web Services like SQS, SNS, DYNAMO-DB, CORAL SERVICE, IOP CHUNKSTORE, Elastic machine learning. Objectives of the project: Objective of my project was to display warranties for ASINs where warranties are not getting displayed, as because of this there was a potential 10% loss in sales. Outcomes of the project: I was able to show 441 extra warranties through the machine learning service that I built. Major Learning Outcomes: I learnt a lot of stuff in my internship with Amazon, It's totally a different environment then college, I learnt about various technical tools that Amazon uses to make development easier, Amazon Web Services, I had a great industrial exposure working closely with the professionals working in the industry and finally it was a great experience. Brief Description of working environment, expectations from the company: They expect us to do a lot of work and don't spare us if we are not able to finish work properly.	2016 17- sem1
Amazon Development Center, Bangalore	The project is to build a tool for Amazon Video Team, using which one can make the pages on the Blast Platform very easily and intuitively avoiding the current hassle approach. This tool also helps to view the changes on pages immediately. Tools used (Development tools - H/w, S/w): JsTree ,ace.js Objectives of the project: Use Free Marker to generate Free Marker Template Language (FTL) for the tree structure provided by the GUI. GUI Styling Tool for tree-view of the json response that has functionalities for: *Creating a web page from scratch *Loading existing json response/FTL page. *Editing the loaded response *Immediate reflection of the response into a webpage Outcomes of the project: All goals are met. Major Learning Outcomes: JavaScript , JQuery , FTL Brief Description of working environment, expectations from the company: Working Environment is good .	2016 17- sem1

Company	Experience	Year
Amazon Development Center, Bangalore	I did my internship with the Retail Business Services (RBS) AutoASIN team in Bangalore office. The objective of Auto ASIN solution is to eliminate all human touch points in RBS New Item Setup (NIS) process by auto creating ASINs and new offers on ASINs. Auto ASIN enables automated correction and validation of vendor submitted item data using Machine Learning models and Natural Language Processing (NLP) algorithms. Tools used (Development tools - H/w, S/w): Amazon Web Services Like Lambda, S3, Dynamo Db, CloudWatch and Amazon Internal Tools. Other tools I used are Hibernate, Spring. Objectives of the project: Improvements in Automated Content Correction and Validation Engine leveraging Machine learned models, Natural Language Processing, and Rule based classification. Outcomes of the project: Increase in the percentage of auto creation of ASIN. Major Learning Outcomes: Natural Language Processing Algorithm and writing industry standard code. Brief Description of working environment, expectations from the company: The work culture in Amazon mainly depends on your team. For a few weeks I faced difficulty in understanding how development was done inside Amazon. Also in some teams there will be pressure and one has to deliver results in order to help the team achieve their goal. Work life balance can be difficult. In spite of all this you will get to learn a lot of new things. I learned NLP algorithms and used AWS services.	2016- 17- sem1
Amazon Development Center, Bangalore	Web development to create a metrics reporting dashboard. Tools used (Development tools - H/w, S/w): S/w - Core java, javascript, html, css, vue.js and Spring MVC framework Objectives of the project: To create a tool that helps managers track defects and all kinds of metrics in software development at a single place Outcomes of the project: The project was completed successfully Major Learning Outcomes: Learnt javascript, vue.js and Unit testing. Brief Description of working environment, expectations from the company: My working environment was too dynamic with 3manager changes and a total of 14 team member changes. I got to learn a lot but the expectations are quite high and it becomes very hectic to adhere to the deadlines. It depends on your team in the end.	2016- 17- sem1
Amazon Development Center, Bangalore	My first project was to optimize the message structure so that multiple messages can be batched and sent as a single message to a queue. My second project was to remove dependency on a database table and use the local api calls instead. The third project required me to add an ability to drive messages to a target queue for a given date range. Tools used (Development tools - H/w, S/w): S/w: Spring framework, AWS services, Mockito framework etc. Objectives of the project: The objective of the first project was to batch 3-4 messages into a single message. The objective of the second project was to remove the dependency on a database table. The objective of the third project was to drive messages for a particular duration to a target queue. Outcomes of the project: For the first project, as it turned out, 3 messages were being batched as one. In the second project, dependency on the table was removed and resolved by making calls to local apis. In the third project, the script takes dates (start and end) and drives the messages. Major Learning Outcomes: I got to learn the internal working of an established MNC. I was also able to use their technologies. I also got to use frameworks like Mockito, Spring etc. I was able to improve upon my coding in java and got to learn xml. Brief Description of working environment, expectations from the company: The working environment at Amazon is very healthy and the company adheres to its policies strictly. The people at amazon always strive for betterment and prefer high standards. They evolve continuously and are eager to learn new things.	2016- 17- sem1
Amazon Development Center, Bangalore	A styling tool for the Amazon Video (AV) team was developed using the Freemarker templating language (FTL). The user creates a tree structure of the page using containers, image views, text views, etc. The tool generates the FTL equivalent of this tree structure, converts it into a json response and then renders the web page in an iframe. This enables automatic reflection of the created tree structure. Additionally, the user can also edit the FTL and reverse generate the tree from it. Tools used (Development tools - H/w, S/w): Java, JavaScript, HTML, CSS Objectives of the project: Provide a platform for developers to play around with different UI components and style definitions all at a single place without having to write java code. The project addresses two main tasks: a. Automatic creation of web pages b. Easy visualization of the elements on the web page Outcomes of the project: The tool built will make it very easy and intuitive to create Amazon Video web pages, without having to write any code Major Learning Outcomes: I learnt how to build an end-to-end application in Java. Working on the server side gave me an understanding of building RESTful applications using Amazon's internal Coral service. Upon working on the client side, I learnt how to code in JavaScript and JQuery. This project gave me ample opportunities to expand my current knowledge of web technologies. Brief Description of working environment, expectations from the company: We were provided with a mentor to guide us for the project. The environment was very conducive for learning new frameworks and was very welcoming for interns. The expectations that the company had from us with regard to the project were satisfied during the course of the internship.	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Bangalore	Work involved many projects, ranging from Database migration and rearchitecturing, to developing new backend services, leveraging AWS services like SQS, SNS, EC2, and various internal development frameworks. Tools used (Development tools - H/w, S/w): IntelliJ IDE, Eclipse Objectives of the project: Platform Development for EasyShip Outcomes of the project: Contributed to several projects of the team, developing services which are to be used by merchants of EasyShip program of Amazon. Major Learning Outcomes: Learned best practices of coding, implementation of OOP principles, various technologies of AWS etc. Brief Description of working environment, expectations from the company: The working environment of Amazon varies considerably depending on the team. Different teams follow different coding practices, conventions etc. However, people are generally very helpful. The amount of work depends on the team allotted, and if that's less, then it may impact conversion chances, so it's important to keep asking for work. Amazon also has a set of leadership principles which they stick to, and evaluate regularly. The leadership principles are important, and Amazon expects employees to practice them. Apart from this, standard qualities like curiosity, hard work, determination are also expected.	2016- 17- sem1
Amazon Development Center, Bangalore	I had two projects during my internship. My first project involved adding data size validation checks to particular input fields of a service. (both front-end and back-end). My main project was to design a new framework to generate payment reports of sellers. The need for this was to overcome all the shortcomings of the previous system and also allow incorporation of new features which are part of the next 3-Year Plan of our team. For this, I had to develop a High-Level design of the new framework along with the Low-Level designs of each component. I further had to implement a POC (Proof of Concept) of the design and show how it overcame all problems of previous system and how the new features could be incorporated through the new design. Tools used (Development tools - H/w, S/w): Frameworks - Spring, Guice, RubyonRails, Powermock, Mockito. Objectives of the project: My first project involved adding data size validation checks to particular input fields of a service. (both front-end and back-end) My main project was to design a new framework to generate payment reports of sellers. Outcomes of the project: The first project was successfully completed and pushed into production. My second project was completed as well. The design was approved by my team and the POC showed the benefits of the design appropriately. Major Learning Outcomes: This internship has been a wonderful learning experience for me. Working with team on live projects have helped me grow my technical skills and concepts exponentially. I have learned many external as well as Amazon-internal tools, software and programming languages which are in demand right now. They include but are not limited to Ruby on Rails, Java, Google Guice, Spring framework, Herd, Coral. I have gained professional skills like dealing with deadlines and presenting designs in a standard manner. I gained technical skills like coding according to standard coding practices, code coverage, deploying changes, software testing, software architecture design. Brief Description of w	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Bangalore	The flow platform which I have been working on, handles the movement of packages moving from one place to other, so that counts at various locations could be tracked. This service uses flow graphs in which entities flow from one location to another. When I started on this service, the flow graph supported only single capacity type for a given flow. My task was to incorporate support of multi capacity flow in the graph, so that counts could be computed for multiple capacities. With incorporation of multiple capacity computes in the flow graph, we remove the requirement of multiple graphs for computing counts on multiple capacity types. Since, I successfully incorporated flow of multi capacity entities, and started computes of multiple capacity in different location. I changed the existing apis to return multiple capacity response, and deprecated the existing volume graphs. Tools used (Development tools - H/w, S/w): Amazon Dynamo Db, Amazon S3, Amazon SQ5, Amazon Kinesis Streams, Amazon Redshift. Objectives of the project: To incorporate multi capacity compute capability in flow graphs. My main project was to design a new framework to generate payment reports of sellers. Outcomes of the project: Successful deployment of multi capacity compute and response in flow graphs. Decreased traffic of messages and data storage by approximately 25% by merging of graphs. Major Learning Outcomes: Working with NoSQL database, serialization and using json structure, better understanding of OOP concepts, OOP design patterns, writing wndustry level code, working and using git, Implementing complex Data Structure, writing algorithms with optimized space time complexity, better understanding of SQL queries and Relational database, understanding and working on new technologies fastly like Amazon aws, functional programming, multithreading and dealing with concurrency issues, team work Brief Description of working environment, expectations from the company: Working environment was very good. Everyone in my team was very knowledgeable	2016- 17- sem1
Amazon Development Center, Bangalore	I interned with the ContX (Context Extraction) team at Amazon. ContX suggests contextually relevant ASINs for advertising on third-party websites. I was allotted two projects during my internship: creation of a centralized log analytics tool and developing a system for provisioning and monitoring of Redis clusters. I completed and deployed these over the course of 5 months. Tools used (Development tools - H/w, S/w): Elasticsearch, Kibana, Logstash, Scala, Akka, Redis, Zookeeper, DynamoDB Objectives of the project: Creation of a system to do the following: Conversion into a common format and aggregation of logs from various services on multiple hosts. Reverse-indexing of logs to allow searches on each field. User interface for querying into the data. Visualization of distributions and statistics using bar charts, graphs, etc. Development of an API over RedisProvisioner which would: Enable the user to provision and configure Redis clusters. Provide the user with the current cluster state information. Aggregate and plot graphs for instance level and cluster level metrics Outcomes of the project: The ELK stack is actively being used for debugging and finding event correlations across services. Scalability of the system has been tested and server configurations for different levels of traffic have been mapped out. This system has also been extended to cover several other use cases. Provisioning and monitoring system for Redis clusters was setup. Major Learning Outcomes: Experience with the ELK stack was the key take away from the first project. While using Elasticsearch, I gained familiarity with the algorithms used for calculating relevance and similarity measures. It also gave me exposure to some of the analyzers and tokenizers used in NLP. I gained a lot of insight into concurrent programming, functional programming and database systems. Brief Description of working environment, expectations from the company: The work culture in Amazon varies across teams. Some teams hand out frequent small tasks while others all	2016- 17- sem1
Amazon Development Center, Bangalore	Created a Data Analytics Platform for Ad Fraud Detection framework and a visualization tool to inspect and track the status of jobs in a pipeline Objectives of the project: The objective of the project is to build an analytics platform for the Ad Fraud Detection framework. Outcomes of the project: A web interface for making analysis on Ad Fraud Detection data. Major Learning Outcomes: Big Data, Pig, Node JS, Redshift, Quicksight Brief Description of working environment, expectations from the company: The company provides all the computation power you need. Have to understand large code base in a small amount of time. Need to write code in production level.	2016- 17- sem1
Amazon Development Center, Bangalore	Generating Order-Id documents from the Amazon streams, and persisting those order id on the top of tracking id documents to Elasticsearch. Making dashboards on the top of Elasticsearch using Kibana and providing Pre-Slam visibilty to Operations people integrating Slam data with ATROPS Pre-Slam Data.  Tools used (Development tools - H/w, S/w): Elastic Search, Dynamo DB, Kinesis, SQS, S3 etc. Objectives of the project: To facilitate work for Operations people and save cost of shipping. Outcomes of the project: Cost reduction for Amazon and fast delivery. Major Learning Outcomes: Coding, new services from Amazon Web Services Brief Description of working environment, expectations from the company: 1) Environment is awesome 2) Surronded by many intelligent people. 3) Scope of learning is awesome.	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Bangalore	Worked on Natural Language Processing, Rule based classification and model based classification Objectives of the project: Improvements in the AutoASIN pipeline Outcomes of the project: Significant increase in the acceptance percentage of the AutoASIN pipeline Major Learning Outcomes: AutoASIN pipeline thorough knowledge, industry level standards of coding, corporate atmosphere Brief Description of working environment, expectations from the company: Very flexible work environment, enough time was given to understand and solve the problem, overall a good learning experience.	2016 17- sem
Amazon Development Center, Bangalore	I worked on different projects ranging from protecting and improving the efficiency of our service to building a new self-service tool to avoid on-boarding process required for new clients. I implemented Throttling to protect our service from any misbehaving client and Caching to cache the response of our downstream service, so for a similar request we don't have to compute again which improves the efficiency of our service. I also created a self-service platform for our team's service which helps in reducing the effort that is required by our team member to on-board any new client to our service. Clients can use this self-service tool to generate clusters of related accounts. Objectives of the project: With the addition of new businesses to Amazon every year, Amazon system becomes more vulnerable to policy violation. Abusers always try to explore different ways to abuse Amazon system, most common way, is through creating multiple accounts. Customer Clustering Service is used to detect those related accounts. My project involves scaling of Customer Clustering Service to improve its efficiency by introducing Throttling and Caching and creating a self-service utility for onboarding new clients. Outcomes of the project: After throttling implementation our team hardly receives any sev2s ticket as now there is no high heap usage on any of our hosts. Self-service utility has helped new clients to generate clusters on their own, without much interaction from our team side. Major Learning Outcomes: From my experience with senior developers I have learned how to write neater, crispier and error free code keeping future requirements in mind. By interacting with my senior team mates I have realized the importance of thinking and keeping future needs in mind before coding. Brief Description of working environment, expectations from the company: Working environment at Amazon is very friendly and ideal to work. Although work load was high but at the same time we had team's outing and all to reduce stress as Amazon believes "	2016 17- sem
Amazon Development Center, Bangalore	All sellers need associated services that would help them boost their sales. These services, such as imaging, transportation etc. are undertaken by companies called Service Providers (SPs). SPN is a platform where the sellers can get into contact with service providers. The entire code base can be broadly classified into 3 layers: the front-end, the backend and the database layer. The front-end layer deals with the web pages and their handling via controllers, while using the Spring MVC architecture. The backend layer mainly deals with the validations and handling of files or messages received from the front-end layer. It processes the received files and passes them to the database layer. The database layer then takes the processed entries and saves them appropriately in the database. The project included work taken in each of the 3 layers. Some of the projects spanned across all these 3 layers while some were confined only to 1 or 2 of the layers. Tools used (Development tools - H/w, S/w): Java, Spring, Apollo, Git, Brazil, DynamoDB Objectives of the project: Platform Development for Service Provider Network Outcomes of the project: Various platforms were developed for interaction of the sellers and the service providers. There were some entirely APIs that were created. Also, a new program called ATES was launched by the Service Provider Network. Major Learning Outcomes: I learnt work on the front-end, the back-end as well as the database layers. Many tools were used and in all, it was a good experience. Brief Description of working environment, expectations from the company: The working environment is very competitive and sufficient responsibility is given to interns. There is variation across teams as some teams expect a lot from the interns right from day 1, while some of the interns are given a lot of time to learn and deliver. However, anyone who wants to learn gets a very good platform. Amazon is certainly not for the weak of heart, for people who get scared of hardwork, because to survive in the long ru	2016 17- sem

Company	Experience	Year
Amazon Development Center, Bangalore	My project was to introduce a web interface in amazon retail website to show customer address attribute related issues and collect feedback for them. I worked on introducing a channel in navigation bar to show such notifications to the customer and also a complete landing page which would give customers a detailed overview of what the address issue is about and details for giving feedback. During my course of internship I got the opportunity to work on a project that was completely new to my team. I was handed over the complete ownership of my project, it involved coming up with requirements based on business logic, understanding existing code base of navigation rendering system, setting up a new web stack, communicating with different team for figuring and closing out blockers. I also got the opportunity to be involved in design discussion for backend service to support the front end of this project. Tools used (Development tools - H/w, S/w): Spring, SQS, Gurupa, Git, internal build/deployment sytems, java, javascript, perl. Objectives of the project: 1) Develop frontend for smart address assistant project, which will be used show customers address issue related notifications and collect feedback. 2) Develop an application that will update inflight shipment with the address attribute information collected from customer. Outcomes of the project: I introduced a new module in navigation bar code base to support rendering address issue notification. The module was generic enough so that when team introduces new type of address issue in toification. The module was generic enough so that when team introduces new type of address issue in toification. The module was generic enough so that when team introduces new type of address issue obtifications and handling requests for recording customer interaction state and responses. Major Learning Outcomes: I got to be part of design discussion of backend service to support the requirements of this project. I learnt how to come up with requirements, closing out on HLD and com	2016- 17- sem1
Amazon Development Center, Bangalore	Worked on building backend services for amazon logistics business. Worked was based on java. Tools used (Development tools - H/w, S/w): Java , AWS services Objectives of the project: 1) Migrate ingestion engine service from database to document model 2) Send shipment status notification events to the customer Outcomes of the project: Project in production Major Learning Outcomes: Writing industry level code, working of various Amazon web services Brief Description of working environment, expectations from the company: Work environment comfortable, result oriented company, no fixed working hours	2016- 17- sem1
Amazon Development Center, Bangalore	Worked on project which helps in access of real time logs. It deals with big data. Tools used (Development tools - H/w, S/w):Intellij Objectives of the project: Build a package which helps in access of real time logs Outcomes of the project: One can view logs constantly on a web-UI Major Learning Outcomes: Learned about latest AWS product Kinesis. Brief Description of working environment, expectations from the company: It was a decent environment. One can get a lot of motivation to work and express ourselves here.	2016- 17- sem1
Amazon Development Center, Bangalore	Worked on image processing Objectives of the project: Determine Bad quality documents Outcomes of the project: Determine Bad quality documents Major Learning Outcomes: Open CV, C++, Java, GoogleProtocol, DynamoDB, Redshift, Tesseract, ImageProcessing Brief Description of working environment, expectations from the company: Hectic working environment but so much to learn	2016- 17- sem1

Company Experience Year

I worked on enhancing my team dashboard. After that, I coded filters for the team website. The coding was done primarily in Java. After testing the website by writing testcases, I moved on to my last project to design an Archival System for the compliance documents my team stores. I came up with a solution of using a timer and integrating it with the service which is a document store. Objectives of the project: 1. Enhance the team dashboard and fix the security challenges. 2. Implement filters for the team website. 3. Modify the existing archival system for document store. Outcomes of the project: 1. In production 2. In gamma 3. In beta Major Learning Outcomes: Learnt to write readable code, AOP, principles of design and software design. Brief Description of working environment, expectations from the company: The expectations for my first project underwent sudden changes which lead to wastage of time in my internship. My team did not scope out the projects properly and hence it wasn't a well laid out plan for my internship. Faculty NAME: ASHISH NARANG Comments: Expectations from industry: Amazon, is one of the largest Ecommerce player in USA has also captured significant share in the Indian market. Interns at Amazon, Gurgaon have worked on improving Last mile delivery services, making registration workflow convenient and straight forward for all 3rd party sellers on Amazon. Technologies include Java Springs, Angular JS, Node JS, Dyanmo DB, Git and many other proprietary tools of Amazon. Organization look

forward to have interns who have excellent programming skills along with good written and oral

writing etiquette's. Student

the project: OOP, DSA, DBMS

communication skills. In order to have better internship experience, students must learn one of the Version Control System (Preferably GIT), revise course on design patterns and data structures. Students should go through standard coding guidelines and follow the same during project assignments. Although most of students have good communication skills, it's better to have soft skill training which also includes email

2016-17sem1

Amazon Development Center, Bangalore

> I was assigned to the advertising team in Amazon. In online advertising, the decision of which ad is to be placed on what site is decided algorithmically, and hence the advertiser doesn't know which site his ad will be placed on. Due to a steady increase in extreme content on the internet, advertisers are more concerned than before about their brand advertisements appearing next to such content. Amazon, as one of the leading digital advertising networks, has been particularly concerned regarding protecting the brand image of advertisers. My project was an exploratory one which involved understanding how brand safety is currently ensured by Amazon, assessing the accuracy of our third-party brand safety partners, experimenting to determine gaps in current brand safety solution and estimating the extent of blind spots in our current solution. The first phase of my project helped in establishing that the current model of evaluating brand safety of a page leaves a lot to be desired and should be improved upon to ensure that our advertisers are safeguarded. To narrow down on what areas we should work on, I developed a really configurable and extensible pipeline, exploiting the AWS cloud solutions, to discover new brand unsafe websites which can be used to validate 3rd party signals, create a training dataset for brand safety model training and allow user to experiment and find features that can be used in the model Tools used (Development tools - H/w, S/w): Used Scala programming language and Play framework for enhancing an internal tool. Used Python for creating Proof of Concept of the experimental pipeline. Used AWS Tools like AWS Lambda, AWS Step Functions, Simple Storage Service, AWS Athena and Elastic Cloud Compute

> Objectives of the project: Finding gaps in current 3rd party solutions, experimenting with different appraches to fix the gaps, developing a pipeline to find websites similar in content to input URLs Outcomes of the project: Analysis of current brand safety systems, Development of a pipeline to find websites similar in content to input URLs Major Learning Outcomes: I was assigned an independent project to work on. I was thus introduced to how a development project is approached from scratch. I learned how to gather technical requirements from ambiguous business requirements, translate them into a flexible, practical and cost-effective design and finally break down the design to small tasks which can be tracked in regular intervals. In the technical side, I improved upon my OOP and parallel programming skills. I was introduced to functional programming (Scala). I also worked with Cloud and distributed computing (AWS Services). Brief Description of working environment, expectations from the company: Amazon provides an environment which promotes learning. You are amongst people who are enthusiastic about technology, are always willing to learn and ready to help. A lot of different interesting projects are going on in Amazon which highlights the amount of opportunities to learn. PPO chances are team dependent, but people normally get one if they work towards achieving the tasks assigned to them. Academic courses relevant to

2017-18sem1

Amazon Development Center, Bangalore

Company	Experience	Year
Amazon Development Center, Bangalore	During my internship, I had to develop an in-depth understanding of the business use case as well as the various services employed to carry out the accounting. Tools used (Development tools - H/w, S/w): IntelliJ, Internal Amazon Tools Objectives of the project: v2 Migration of India Businesses from CALVIN to FLARE for Shipment Outcomes of the project: India business of Amazon was migrated to v2 Major Learning Outcomes: Concepts of OOPs, Unit Testing, Regression Testing, Deployment Brief Description of working environment, expectations from the company: Working Environment was really good. The company fulfilled most of my expectations Academic courses relevant to the project: Object Oriented Programming, Computer Programming, Data Structures and Algorithms	2017- 18- sem1
Amazon Development Center, Bangalore	Improved the functioning of the portal used by people from operations team in Europe, Japan, China and North America. Improved the loading time of the web pages which was causing a lot of problems for the ops. I also improved the caching process by optimizing it using parallel threads. Tools used (Development tools - H/w, S/w): Java Spring Objectives of the project: To improve the slowness of the portal and to optimise the caching process of the back end service Outcomes of the project: Improved the loading time of the website by 90%. Improved the cache updation process by 40%. Increased the CPU utilization by 50% Major Learning Outcomes: Multi threading Brief Description of working environment, expectations from the company: The work depends on how you want to do it. For me the work was hectic. Had to spend long hours in the office. Apart from work all the people in my team were friendly especially my manager. My manager always looked from my career growth aspect. Amazon provides all the tools you want to achieve success Academic courses relevant to the project: Object Oriented Programming, Operating Systems, Database Management Systems, Data Structures and Algorithms.	2017- 18- sem1
Amazon Development Center, Bangalore	I was an SDE Intern in the Advertising Technology team. My project was to explore the usefulness of quantifying website quality in advertising business metrics such as Click through rate, consideration rate and conversion rate. I wrote javascript and scala code to extract features from websites at scale. I then cleaned, transformed, augmented, and visualized the data to identify trends in performance metrics attributed by these features. Tools used (Development tools - H/w, S/w): Javascript, Scala, AWS Technologies (EC2, S3, SQS, SNS, ASG), Apache Hadoop, Spark, Zeppelin, PIG Objectives of the project: 1. Featurize quality of a website and extract them, 2. Analyse/Find trends in features across sites Outcomes of the project: 1 improved the existing feature detection algorithms, and added new features and algorithms to extract over 25 features per webpage at high precision. This feature extraction pipeline is implemented at scale, and tested. The features extracted for the sites were then interpreted against advertising performance metrics to identify ways to use these features in lifting advertising performance. Several features showed interesting and useful trends, they are still undergoing further experimentation before being put into production. Major Learning Outcomes: The project required me to code in JavaScript and Scala. It was great exposure to coding in the style where both functional and object-oriented paradigm were used, played to their strengths- writing pure functions at method level, using immutable objects creating code with no side effects, while using the OOP to model the entities, encapsulate data and modularize code. I learnt to use several big data and AWS technologies. I learnt how to think like an SDE, keeping in my mind the following while developing any product - quality, scalability, reusability, benchmarking and writing unit & integration tests. I learnt several methods of data analysis, and how to approach solving qualitative problems. I also learnt several leadership and interperso	2017- 18- sem1
Amazon Development Center, Bangalore	Developed key features for my team. Used Elasticsearch, DynamoDB, AWS Data Pipeline, etc. The domain was web development. Tools used (Development tools - H/w, S/w): Java, Spring MVC, DynamoDB Objectives of the project: Features for the AVS platform Outcomes of the project: Features for the AVS platform Major Learning Outcomes: Learnt to write unit tests, UI tests. Learnt to write re-usable, clean code. Brief Description of working environment, expectations from the company: Working environment is stressful compared to other big firms. Deadlines are strict if you work along with the team, rather than being handed a stand-alone project. In most teams, work is dictated by the product management teams and you build a product for internal use at Amazon.Big companies don't care about individual employees. Surpassed expectations, but wasn't handed an offer letter due to internal issues. Was told about this at the very end. Academic courses relevant to the project: OOPS	2017 <sup>.</sup> 18- sem1

Experience Year Company My project involved development of the front-end and backend of a tool for business rule validation in fraud detection. For the implementation of the project, I had to learn various concepts like model-viewcontroller (MVC) architecture, SQL and No SQL databases and knowledge of REST APIs . Tools used (Development tools - H/w, S/w): The core development was done in JAVA 8 and the testing for the back end was done using Mockito and JUnit frameworks. As part of front-end designing of this tool, I worked on Ruby on Rails. Ruby on Rails is a server-side web application framework written in Ruby, which is a highlevel object oriented programming language. Rails is a model-view-controller framework. Objectives of the project: Tool development for validating business rules for fraud detection Outcomes of the project: A complete functioning service with an integrated back-end and front-end Major Learning Outcomes: Apart from learning various software related concepts, I also got a flavor of the life in IT industry. It is very important to be on your toes, responsive and pro-active when it comes to delivering and meeting the deadlines one estimates. I also realised how working in industry is different from academic projects. In the IT industry there is a lot of emphasis on correcting the edge cases associated with a given problem. Also, 2017-Amazon Development the code is subjected to a large number of stress tests to make them as bug-proof in the future as possible. 18-Center, Bangalore The programs are also reviewed by various other experienced developers to reduce possibility of bugs and sem1 to maintain a uniform coding standard within the team. Moreover, even while writing the code, a lot of emphasis is laid on making it based on the industry standards, easy to read, at the same time exploring about the advancements in the coding practices. Brief Description of working environment, expectations from the company: Here at Amazon, the best part was that we were not given any kind of spoon feeding. We were taught to expect help only in minimal matters. The solution was not provided directly. We were asked to read and explore on our own. It was difficult at first but ultimately this made us independent and quick at problem identification and resolution. And this was the biggest factor in helping me transition from academic learning to industrial application. PS-2 helps one to build their persona, knowledge base and interact with industry experts. The experience at PS-2 - if not affect my future career prospects - has at least made me aware of the current industry standard and situation and that adds to better chances at scoring a workplace in future. Academic courses relevant to the project: Object Oriented Programming with JAVA, Databases, Data structures and Algorithms. Did various feature extractions and feature transformations required for the machine learning model in Scala like binning, scaling etc. Used the spark transformer class as part of the spark machine learning pipeline for all the transformers. Built a trie data structure to store prefixes of URLs and also did various data analysis on the obtained trie. Did feature verification to check whether the feature vector obtained after the feature engineering process were correctly binned and indexed in the metadata. Tools used (Development tools - H/w, S/w): Scala, Spark, Amazon's EMR, Amazon's S3 Objectives of the project: The objective for omega bidder feature engine is to create a machine learning model and train it over the data obtained from the associates such that it accepts the input about the viewer and the page on which ad will be displayed and generates product which will be most apt. The advertisement thus displayed should also 2017-Amazon Development increase the chances of being clicked and thus increasing the revenue generated by the team to the 18-Center, Bangalore company. Outcomes of the project: The project is being run as an experiment by the team. Major Learning sem1 Outcomes: Got to learn Scala and Spark. Also learnt many internal Amazon tools like EMR and S3. Brief Description of working environment, expectations from the company: I was given a conference room along with the other interns in my team. The environment was so quiet and peaceful for doing the work. Also my team sits pretty close to the room, so it was easier for me to interact with them whenever possible. My manager and mentor were easily approachable and have given me all the help and guidance that I need. The project required of me to learn Scala within the first 10 days of my joining here as an intern. And also to document each and every piece of work that I have done so that it is easier for others after me to understand the work that I have done and pick up from where I left off easily. Academic courses relevant to the project: Machine learning, Object Oriented Programming. The team I worked is SellerFlex, which provides warehouse management solution to sellers in India. I was allocated the project of enabling order cancellation feature to the customers. Tools used (Development tools - H/w, S/w): Amazon Web Services like S3, EC2, SQS, DynamoDB Objectives of the project: enabling order cancellation feature to the customers. Outcomes of the project: Deployed successfully Major 2017-Amazon Development Learning Outcomes: While doing this project, I got practical understanding of distributed computing in real 18-Center, Bangalore time use-cases. Brief Description of working environment, expectations from the company: I learnt to solve sem1 many business problems and got the opportunity to design software architectures the way I want it. This expanded my horizons and gave me enough freedom to explore new possibilities. Academic courses relevant to the project: Data Structures and Algorithms, Object Oriented Programming.

Company Experience Year

I worked on Web Development (full stack) in ruby rails, Machine Learning in python and java, backend java services, amazon web services, etc. It took quite some time to get friendly with Amazon technical infrastructure, but now I appreciate the robustness of the infrastructure. The initial pace of work was great as I was implementing new features in a few days. But later it got difficult as I had to follow team coding practices using predefined modules, declarations, renderers, etc which took very long to implement. The Spring framework in java, oop in ruby, advanced implementations in js and haml, the brazilpython coding practice were great technical learnings. For the java services, Amazon uses internal service architecture which allows usage of various services inside any package. I learnt about autowiring, inversion of control, enums, etc. In python, I implemented logistic regression, random forests, adaboost ML algorithms an in java, I used Apache Spark for these algorithm implemtations. I worked on an Amazon program which had huge ad revenue for Amazon. It was a great experience as I had never worked on such a large scale before. Tools used (Development tools - H/w, S/w): java service framework, python, aws services, ruby on rails, js, haml, etc Objectives of the project: Training model and creating training dataset by creating manual labelling tool Outcomes of the project: Labelling tool and the apache spark model is being used for cross marketplace prediction. Major Learning Outcomes: spring framework, ruby on rails, apache spark java, sklearn library, js, haml, etc Brief Description of working environment, expectations from the company: The overall experience at Amazon Development Center, Bangalore was great because I got to work on lots of new and exciting technologies. The past five months have been an amazing learning opportunity. The timings were flexible and work culture was quite chill. My manager updated me with every new technology and activity of the team. Apart from learning various software related concepts, I have also realized how working in industry is different from academic projects. In industry there is a lot of emphasis on correcting the corner cases associated with a given program. Also, the programs are subjected to large number of stress tests so as to make them as buq-proof and future-proof as possible. The programs are also reviewed by various people to reduce possibility of bugs. Moreover, even while writing a program, a lot of emphasis is laid on making it easy to read, understand and manage. These kinds of programming practices are very typical to industry. Practice School experience has also helped us become familiar with the required essional attitude and the working environment of companies. We also got an opportunity to interact with and learn from many essionals who already have a lot of experience of working in industry. The constructive feedback from them has helped us in developing new skills as well as refining other skills. Hence Practice school has provided us ample opportunity to implement the techniques learnt in classroom as well as learn new concepts. I sincerely believe that due to this hands-on experience we are now better

prepared for the future and experienced gained here will help in smoother transition from academics.

Academic courses relevant to the project: ML, OS, CP, OOP

Amazon Development Center, Bangalore 2017-18sem1 Company Experience Year

The major learning that I acquired in my 5 and half months of tenure at Amazon Development Centre, Bangalore, one of the leading corporate giants, are twofold. The first was the technical aspect of things and the second was of character building. Having been inducted into Amazon without much prior Industrial Experience, It turned out to be quite fruitful in terms of the technological expertise that I gained here and at the same time overwhelming in the first couple of weeks .The latter was mainly because a company operating at the scale of Amazon, has gone a long way ahead in building its automated systems. A fresher has to get onboarded to a variety of internal systems within a short span of time given that we have to complete our projects within the designated timeframe. Not only is one expected to become familiar to the tools but also to use them with expertise . I had to pinpoint the problems and solve them in an organized way, one step at a time. This helped me improve my Problem-Solving skills. Apart from that, I had the opportunity to work on a live project which included writing a Java service from scratch. I had to put into action various Computer Science Fundamentals like Multithreading, OS, Object-Oriented Programming ,Dependency Injection ,Distributed Computing to complete my project. Apart from learning various software related concepts, I have also realized how working in industry is different from academic projects. In industry there is a lot of emphasis on correcting the corner cases associated with a given program. Also, the programs are subjected to large number of tests so as to make them as bug-proof and future-proof as possible. I had the opportunity to write Unit tests and Integration Tests for the same.The programs are also reviewed by various people to reduce possibility of bugs. Moreover, even while writing a program, a lot of emphasis is laid on making it easy to read, understand ,manage and future modification. These kinds of programming practices are very typical to industry. In my time here, I also learned how to work alongside other people and learned the true meaning of teamwork and how important colleagues are in an office space. Some of the take backs from my industrial experience are: You have to deliver results to earn trust. You have to continuously strive yourself to learn and be curious. You have to take ownership of every little deliverable you have produced. My major accomplishments include the trust and confidence that my mentor showed in me while doing the work load. My ability to solve the problems in the way advised and also in the time allotted is definitely an accomplishment for me. I would also count my ability to deliver results as a major achievement .I was able to independently complete a work-heavy project which has huge customer impact for Amazon within the given time span.I would list that as my other achievement. Tools used (Development tools - H/w, S/w): Java, JUnit, Mockito, Elasticsearch , Python, Shell Scripting Objectives of the project: Objective Of the project is to roll out Reporting Service in Elasticsearch 5.6 as opposed to 1.7 which was used earlier. Outcomes of the project: Achieved Major Learning Outcomes: The major learning that I acquired in my 5 and half months of tenure at Amazon Development Centre, Bangalore, one of the leading corporate giants, are twofold. The first was the technical aspect of things and the second was of character building. Having been inducted into Amazon without much prior Industrial Experience, It turned out to be quite fruitful in terms of the technological expertise that I gained here and at the same time overwhelming in the first couple of weeks .The latter was mainly because a company operating at the scale of Amazon, has gone a long way ahead in building its automated systems . A fresher has to get onboarded to a variety of internal systems within a short span of time given that we have to complete our projects within the designated timeframe. Not only is one expected to become familiar to the tools but also to use them with expertise. I had to pinpoint the problems and solve them in an organized way, one step at a time. This helped me improve my Problem-Solving skills. Apart from that, I had the opportunity to work on a live project which Included writing a Java service from scratch . I had to put into action various Computer Science Fundamentals like Multithreading, OS, Object-Oriented

Programming ,Dependency Injection,Distributed Computing to complete my project. Brief Description of

competitive to bring out the best in you. People here treat you as any other employee and consider you as an important part of the team. You are required to show ownership for every little work you do, learn and

working environment, expectations from the company: The environment at Amazon was highly

be curious. Academic courses relevant to the project: Information Retrieval ,Object-Oriented

Programming, Distributed Computing

Amazon Development Center, Bangalore 2017-18sem1

Company	Experience	Year
Amazon Development Center, Bangalore	My project was to develop a recommender system based on deep learning and computer vision. I learnt how to apply deep learning at scale and train neural networks on massive datasets. It also involved a lot of distributed computing on Hadoop and on multiple GPUs using MXNet. Tools used (Development tools - H/w, S/w): MXNet, Python, Hadoop, AWS Objectives of the project: Given an input URL to the contextual advertising pipeline, recommend the most visually similar products on Amazon as present in the images and described by the text on the webpage. Outcomes of the project: Developed a crawling algorithm to extract contextually relevant images and text from a webpage which is then used by a service with a convolutional neural network to find visually similar products. Major Learning Outcomes: Big data, Hadoop and distributed computing, Large scale deep learning and visual recognition, Designing Cloud based applications. Brief Description of working environment, expectations from the company: As Amazon developed AWS, cloud computing is used by almost all teams - this inevitably makes you learn and think in terms of developing applications using cloud services. Apart from machine learning and cloud computing, Amazon also helped me learn the basics of software development. You are encouraged to write high quality code as every code change goes through an extensive code review before getting shipped and there is a lot of emphasis on code quality and testing. Because of the scale Amazon operates at, there is a lot to learn about designing scalable services and developing tools that allow fast iteration. Academic courses relevant to the project: Machine Learning, Neural Networks and Fuzzy Logic, Data Structures and Algorithms, Principles of Programming Languages, Operating Systems.	2017- 18- sem1
Amazon Development Center, Bangalore	Worked on enhancements of features for a product called 'Vendor Success Program' Tools used (Development tools - H/w, S/w): Java, DynamoDB, S3, SNS, SQS, HTML, CSS, JavaScript Objectives of the project: Enhancement of features for Vendor Success Program Outcomes of the project: Coral APIs, weekly reporting for the product, front-end enhancements Major Learning Outcomes: API development, Reporting services development, Front end development Brief Description of working environment, expectations from the company: The work here was heavy but the learning experience was great. Academic courses relevant to the project: Object Oriented Programming, Database Systems	2017- 18- sem1
Amazon Development Center, Bangalore	I have worked on a variety of projects, each utilizing various technologies at Amazon. All the work for my team involved both front end and back end coding according to the MVC architecture. I was also involved in auxiliary process such as gathering information from stakeholders, design review, etc. Tools used (Development tools - H/w, S/w): Java, JavaScript, JSP, Tomcat, Spring Objectives of the project: Create a new web application Outcomes of the project: Created a new web application which was then tested out in one production site before worldwide rollout. Major Learning Outcomes: As an engineer, I found that my job role was not strictly constricted to accepting a project and coding the changes. I was also expected to gather information from stakeholders, come up with designs and document all my work. I found this to be slightly challenging at first, especially as I did not know how to speak with someone in a professional setting. Over time, I have grown in this regard and now I can initiate conversations with Amazon employees halfway around the world if I need any help. Brief Description of working environment, expectations from the company: The working environment at Amazon is very friendly and perfect for new graduates. I can walk into work wearing shorts and speak with my manager™s manager on a first name basis without raising any eyebrows. In fact, people are usually more surprised to hear someone being addressed as œSiror œMa™am•. The working hours are flexible, and you are not expected to work a certain number of hours, as long as you can deliver on your projects. I have grown to think of my team mates not just as coworkers, but also as friends, as we often go for dinner outings to various eateries around Bangalore. Academic courses relevant to the project: OOP.	2017- 18- sem1
Amazon Development Center, Bangalore	Designed Create And UpdateLoan API and GetLoanByPartnerId API for GLMLoanService. Tools used (Development tools - H/w, S/w): Google Guice, Hibernate, Aurora Database, Brazil CLI Objectives of the project: To reduce hassle of acquiring loans for Amazon sellers from banks. Also build model such that it is easily scalable Outcomes of the project: Cannot be disclosed Major Learning Learnt various leadership skills like Dive Deep, Bias for actions etc. Details of papers/patents: None. Brief Description of working environment, expectations from the company: Excellent Environment. Excellent Work and people work with motto work hard stay foolish. Academic courses relevant to the project: DBMS, OOP	2017- 18- sem1

Company	Experience	Year
Amazon Development Center, Bangalore	I did my PS II at Amazon Development Center, Bengaluru. I got to learn lots of new things. Right from AngularJS to big data technologies like Spark and Hadoop. At Amazon, everyone is treated equally. May it be an intern or an employee, every individual™s opinion is weighed equally. This was one thing I liked about working here. You point out and suggest things if you don™t feel something is right. This makes it easy to learn as it helps break barriers within the team. Other things I learnt at Amazon was best coding practices, design patterns, writing testable code and thinking in terms of how well can our software scale rather than just write normal code. Tools used (Development tools - H/w, S/w): Spark, Hadoop, AWS, Angular, JAX-RS Objectives of the project: Build a few metrics based on huge data and build web portal Outcomes of the project: Publishing metrics and web portal Major Learning All technologies used in the project and best software development practices Brief Description of working environment, expectations from the company: The people were very knowledgeable and helpful. Academic courses relevant to the project: OOP, DSA, DAA. Mentor Designation: Project Lead Students work is satisfactory. Faculty Comments: Expectations from industry: Students need to have knowledge in the areas of predictive analytics, machine learning, deep learning and Big Data Analytics. Student	2017- 18- sem1
Amazon Development Center, Chennai	Created an album management service for customers where they can update and query images against their identifiers. Tools used (Development tools - H/w, S/w): Android, Mockito and JUnit Objectives of the project: To create an easy to use album management service which could serve internal as well as external customers in storing and accessing their images from anywhere. Outcomes of the project: Project was completed successfully and is in production stage. Major Learning Outcomes: Learnt test-driven development. Writing units tests and intricacies in writing production level code. Understood importance of design patterns in services. Brief Description of working environment, expectations from the company: Working environment is extremely casual. Managers and senior developers are helpful. We were treated like any other full time employee. Expectations from the company would be more frequent interactions with HR regarding internship and conversion(PPO) processes. Academic courses relevant to the project: Object oriented programming.	2017- 18- sem1
Amazon Development Center, Chennai	Developed a self-service portal for internal customers Tools used (Development tools - H/w, S/w):  AngularJS, Bootstrap, AmazonUI, MrTable Objectives of the project: To reduce opertational load of team by developing self-service portal Outcomes of the project: Portal is ready for within team usage, requires audit integration before exposing to customer Major Learning Outcomes: Web development with modular architecture, learnt frontend technologies like angular JS, bootstrap, AmazonUI, wrote backend APIs.  Brief Description of working environment, expectations from the company: Work environment is cheerful and helpful. Daily updates helped me in gauging individual performance and scopes for improvements. Academic courses relevant to the project: Object oriented programming.	2017- 18- sem1
Amazon Development Center, Chennai	worked on project called ingrid Tools used (development tools - h/w, s/w): gwt, gremlin Objectives of the project: development of front end Outcomes of the project: a tool for amazon customers Major learning outcomes: learnt gwt and other graph tools Brief Description of working environment, expectations from the company: it was a very enriching expereince Academic courses relevant to the project: JAVA	2017- 18- sem1
Amazon Development Center, Chennai	Alexa skill development Tools used (Development tools - H/w, S/w): Develop Alexa Skill Objectives of the project: DEVELOPMENT OF FRONT END Outcomes of the project: Develop Alexa Skill Major Learning Outcomes: programming methodology Brief Description of working environment, expectations from the company: nice, adaptable, comfortable environment, good projects Academic courses relevant to the project: OOP Student	2017- 18- sem1
Amazon Development Center, Delhi	Redesigned the seller profile page for Amazon Marketplace. Deprecated two internal services and implemented an alternate efficient solution for the same business logic. Tools used (Development tools - H/w, S/w): Java, Spring, Git, Mockito, Junit Objectives of the project: To enhance the seller experience and remove frictions from the registration and post-registration part Outcomes of the project: Seller Profile page is live in China and is scheduled to launch in other realms in coming months. Major Learning Outcomes: Writing Industrial level code. Brief Description of working environment, expectations from the company: Got to learn a lot, especially the scale and the impact of work assigned is equivalent to that of any other full time employee.	2016- 17- sem1
Amazon Development Center, Delhi	Client and Server side development of application that verifies phone possessed by the user in realtime. Tools used (Development tools - H/w, S/w): Git, Java, Easymock Objectives of the project: Client and Server side development of Application that verifies phone possessed by the user in realtime Outcomes of the project: Client and Server side development of Application that verifies phone possessed by the user in realtime Major Learning Outcomes: Git, Java, easymock Brief Description of working environment, expectations from the company: Client and Server side development of Application that verifies phone possessed by the user in realtime.	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Delhi	Had a great time using new tools like Elasticsearch, Kibana and Logstash. Frontend developing using AngularJs, Javascript, css and HTML. Also had a chance to work with a variety of databases like DynamoDB offered by Amazon as well as other internal Amazon databases. Tools used (Development tools - H/w, S/w): AngularJS, GIT, MySQL, HTML, CSS Objectives of the project: Representing the data metrics in a visual format. Outcomes of the project: Internal tool for Amazon, to help build business logic. Major Learning Outcomes: Learning about the complete architecture of the Amazon-wide delivery systems and applying my knowledge to debug issues and completing the testing for timely delivery of the projects. Brief Description of working environment, expectations from the company: One of the biggest plus points at Amazon is the amount of knowledge one can gain continuously. There seems to be no saturation point whether you are a fresher, a person with 2 years of experience or someone with 10 years of experience. The breadth of technologies and continuous improvisations, that too with increasing scalability, just keeps one excited. The work is always customer oriented and the impact of the smallest of changes can directly be seen through the customers. Also, the amazing number of tools present at Amazon make the job so much more fun and easy for a developer. There is literally a tool for everything. The work culture is generally good and the work environment largely depends on the team. All in all, great place to learn and work.	2016- 17- sem1
Amazon Development Center, Delhi	Making front-end for an internal service and building an approval workflow in the back-end, that takes user input, stores it, assigns an approver to that request from an authorized team, send mail to that approver, executes the request and store result in storage once approver approves the request and sends a notification mail to both approver and requester. Dashboard that gives remaining requests and assigned approvers so that any member from team can approve that. Tools used (Development tools - H/w, S/w): Languages - Java, Spring, Angular JS, CSS, HTML, JUnit, GIT Objectives of the project: To ease the work of developers by directly linking requester to approver. Outcomes of the project: The workflow was successfully created. Major Learning Outcomes: I learned professional coding, efficient coding, testing and designing a problem. Brief Description of working environment, expectations from the company: There was a LOT to gain and learn. Project was good and environment is very friendly.	2016- 17- sem1
Amazon Development Center, Delhi	Had a great time using some new Java concepts like Generics including TypeReference and Optional parameters for back-end development. Worked with Java Springs, JUnit testing and different mocking frameworks like PowerMock, Mockito, etc. Also had a chance to work with a variety of databases like DynamoDB offered by Amazon as well as other internal Amazon databases. Tools used (Development tools - H/w, S/w): Java, GIT, DynamoDb, NoSQL, Java Springs Objectives of the project: Moving static business configurations to a common data store for onboarding a new store chain to avoid code changes and eliminate SDE effort increasing the efficiency of the process by 4-5 times. Outcomes of the project: Automation of the on-boarding flow for new store chains under Amazon. Major Learning Outcomes: Learning about the complete architecture of the Amazon-wide delivery systems and applying my knowledge to debug issues and completing the testing for timely delivery of the projects. Brief Description of working environment, expectations from the company: One of the biggest plus points at Amazon is the amount of knowledge one can gain continuously. There seems to be no saturation point whether you are a fresher, a person with 2 years of experience or someone with 10 years of experience. The breadth of technologies and continuous improvisations, that too with increasing scalability, just keeps one excited. The work is always customer oriented and the impact of the smallest of changes can directly be seen through the customers. Also, the amazing number of tools present at Amazon make the job so much more fun and easy for a developer. There is literally a tool for everything. The work culture is generally good and the work environment largely depends on the team. All in all, great place to learn and work.	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Delhi	I worked mainly on seller registration part of Amazon's European marketplaces. My tasks were related to Seller Verification and Payment Instrument authentication. First task focussed on automating the verification of Chinese sellers by integration of are verification system with external vendor-Trulioo. Final task given to me involved designing and implementing multi-factor authentication during addition of payment instruments. Multi-factor authentication is an additional verification mechanism which safeguards the customer in an event the login and password gets compromised. The seller is redirected to the bank site in case verification is required for the payment instrument he added. Tools used (Development tools - H/w, S/w): Java, Git, Angular JS, JavaScript, HTML::Mason, EasyMock/Mockito (for unit testing) Objectives of the project: Seller Verification, Payment Instrument Authentication Outcomes of the project: Reduced Seller Friction, Automated Seller Verification, Fraud Detection Major Learning Outcomes: Unit Testing, Writing clean code, Design Patterns, Problem Solving, Team Work, Object Oriented Concepts, Industry Software Development Practices Brief Description of working environment, expectations from the company: Amazon is a very good company for anyone to start his/her career in the field of software development. Active and continuous software development process helps one to keep learning and improving all the time. Also, you get to work with some of the best brains in the field who help you to develop as a developer as well as a professional. With Amazon being a global company based on service oriented architecture, you work along with various teams throughout the world to launch a single product. Amazon's leadership principles give us perfect guidelines whenever a decision making situation arrives during the course of our professional career. In a nutshell-Learning, Improvement, Challenges, Customer Satisfaction, these are the everyday aspects of person's life in Amazon.	2016 17- sem
Amazon Development Center, Delhi	Had a great exposure on Java for backend development and Angular JS for front end development. Also, learned different frameworks for Java like JUnit Testing, Springs, Easy Mock, Mockito. Tools used (Development tools - H/w, S/w): GIT, Anglar JS, Java Springs. Objectives of the project: One Click Platform Genereration and Encryption of Rest Calls to Platform Outcomes of the project: One Click Platform Genereration and Encryption of Rest Calls to Platform Major Learning Outcomes: Working in tasks and debugging issues to find actual problems. Brief Description of working environment, expectations from the company: Great work culture and given sense of responsibility by giving work which has actual interaction with customers.	2016 17- sem
Amazon Development Center, Delhi	I completed 3 projects and worked on multiple services of the Seller Registration team. Objectives of the project: 1. Enable product owners are now able to use multiple email templates and do A/B testing for the same. 2. Deprecated the calls made to legacy service, which was an immediate effort by the team. 3. Migrated Minimal Registration workflow to new seller onboarding platform, SWIPE Outcomes of the project: 1. The product owners are now able to use multiple email templates and do A/B testing for the same. 2. Deprecated the calls made to legacy service, which was an immediate effort by the team. 3. Migrated Minimal Registration workflow to new seller onboarding platform, SWIPE. Major Learning Outcomes: a. Gain familiarity with Coral platform b. Gain familiarity with advanced java concepts like multithreading and c. Gain familiarity with various workflow technologies like-SWF, Herd, etc. d. Understand the working of various seller onboarding services like SCORE, Aurora, SWIPE Brief Description of working environment, expectations from the company: Being a multinational company, and surrounded by competitors of e-commerce the work done is confidential and strictly as per the company policies, following all security measures. Hence, there is no further scope of collaboration of any kind.	2016 17- sem
Amazon Development Center, Delhi	Student has worked on the following   Authentication of the user on firing the request to server. Based on the request POST/GET from PAMS after the request goes through Admiral. Then showing all the status on UI. Student has learnt the following new concepts     Allow user interface for UI experiences Sentry, amazons internal tool for authentication A-rest calls and design. Exception filters of Java AAA, amazon internal automated authorization tool. Simple stack, like horizonte, web development platform. Objectives of the project: a. Gain familiarity with various access control techniques b. Gain familiarity with various internal tools like Sentry and AAA. c. Gain knowledge of working of IHS and Admiral. d. Understand the Configuration of PAMS. e. Using the above knowledge, migrate modules to PAMS.3. Migrated Minimal Registration workflow to new seller onboarding platform, SWIPE Outcomes of the project:	2016 17- sem

Company	Experience	Year
Amazon Development Center, Delhi	Deprecation of a service by making necessary code changes in the backend. Writing new classes as well as test cases to verify the code and its functioning. In addition to that, I performed various frontend changes in the beginning to understand Amazon Technologies and Systems. Tools used (Development tools - H/w, S/w): Languages-Java Springs, Angular JS, CSS, HTML, XML Objectives of the project: To remove dependency of SWIPE on SCHOLA Service Outcomes of the project: The deprecation was successful. Major Learning Outcomes: I learnt industry standards of coding, testing and verification of code and designing a system from scratch. Brief Description of working environment, expectations from the company: It is an excellent learning opportunity, people are friendly and helpful. The environment is extremely relaxed as well.	2016- 17- sem1
Amazon Development Center, Delhi	The work involved building the new version of Merchant Portal, which is an internal Amazon tool used by the Marketplace and other teams throughout the world for ease of access. It basically provides fast access to Merchant data and links to other services which might be helpful in dealing with the registered Merchants. Tools used (Development tools - H/w, S/w): Horizonte, AUI, Spring MVC, Apollo, Brazil Objectives of the project: Build a platform to ease and speed up the process of dealing with registered Merchants with Amazon. Outcomes of the project: Completed the platform. Major Learning Outcomes: Had to deep dive into the technology used and hence it was a great learning experience as I was the only one in the team working on the project. Brief Description of working environment, expectations from the company: Working environment is pretty cool. People are friendly and amazing, and of course helpful and knowledgeable. The environment is pretty casual. The work culture is amazing. While people work hard, they also enjoy as much. All in all, a great place to work at. Faculty NAME: T V RAO Comments: Expectations from industry: At Amazon, interns are brought up speed in first month using several mechanisms, such as boot camps, self-study, small assignments. Afterwards, interns are expected to work on projects that will lead to production applications. They use wide range of open source (and few proprietary) tools and technologies. They expect students to possess good knowledge of basics, OOAD, web development, SQL/NoSQL databases, analytics, and testing. During internship students need to work with the preferred frameworks, libraries suggested by their groups. Some of the concerns heard from mentors include noncompliance to coding standards, need for better documentation, and ownership of tasks. Student	2016- 17- sem1
Amazon Development Center, Delhi	I have worked on the following "a) Automating the test suite using Espresso and UIAutomar frameworks b) Integrating the automated tests in pipeline Tools used (Development tools - H/w, S/w): Android Studio, Espresso, UIAutomator Objectives of the project: Automate the manual testing. Outcomes of the project: Reduced testing time from 7 days to 3 days. Major Learning Outcomes: Android Programming. Brief Description of working environment, expectations from the company: amazon has many divisions working in almost all the sectors of computer science and more. Hence, the possibilities are endless. Academic courses relevant to the project: OOP	2017- 18- sem1
Amazon Development Center, Delhi	One of the projects ensured that notification to customers never failed and at the worst it can delay. The other project was to send invoice notifications which automated the process of generating and sending invoice notification to the property owners of The Hub. Tools used (Development tools - H/w, S/w):  Amazon AWS technologies, Java Objectives of the project: Design and develop re-drive feature for Omni Notification Service which handles all notifications to the customers of Amazon Hub. Outcomes of the project: Successfully completed the project Major Learning Outcomes: Design patterns, amazon technologies Brief Description of working environment, expectations from the company: Competitive culture, Timings are flexible Academic courses relevant to the project: OOP, DSA, DBS	2017- 18- sem1
Amazon Development Center, Delhi	I worked on building a Metric System for Amazon. The metric system computed various kinds of metrics for one of the sub projects (a framework and bunch of machine learned models) of Amazon. This metrics provided the online performance statistics, deep information about the model for each prediction and served the business interest. I also worked on analyzing some signals of the Seller's profile. Further, I build a predictive (machine learned) model which would help Amazon identify the pain points of the seller. Thus the solution would be displayed to the seller as soon as he clicks on 'Get Support'. Tools used (Development tools - H/w, S/w): Apache Spark, Python, AWS DynamoDB, AWS S3, AWS EMR, AWS Lambda Objectives of the project: Building a metric system, Building a Predictive Model. Outcomes of the project: Metric System, Analysis of Seller Profile Events and a predictive model to predict the case creation behaviour of seller. Major Learning Outcomes: Apache Spark, AWS Brief Description of working environment, expectations from the company: The working environment is quite professional. I had a bunch of pretty enthusiastic, full of zeal, and really helpful peers. The best thing I liked about Amazon is the no boundary attached policy. That means, I was free to work on any aspect of any program. If I had some ideas, my opinions were well discussed and thought upon. The agility and the rather active work environment is something Amazon is known for. I worked with some of the cutting edge technologies. Academic courses relevant to the project: Data Mining, Machine Learning.	2017- 18- sem1

Company	Experience	Year
Amazon Development Center, Delhi	The project involved the design of a model and service to return Container details, given user queries. A list of conditions could be provided, along with the field to be ordered on (ascending or descending). Also, the number of queries to be returned could be specified, but was not mandatory. Nor was it mandatory to order, and an unordered response would be returned if no order was specified. Attempt has been made to keep the code scalable, and accommodate more databases (for example, SQL-based ones) in the future. Return of specific desired fields is being tried now. The queries were taken in a user-friendly form, and then converted to the required ElasticSearch query JSON format. The Kibana interface was used to form those queries. Validation is done to see if the query values are feasible. If yes, a network call to the Elastic Search cluster end point brought the required number of results, which were sorted within the code to give to the users as output. Otherwise, exception is returned. This has been implemented to ensure that too many unnecessary network calls are not made. Test cases have been written to ensure a high code coverage ratio Tools used (Development tools - H/w, S/w): Java, ElasticSearch (Kibana interface), GIT Objectives of the project: Provide a layer of abstraction over the database to users, and return results to queries based on simple, user-friendly inputs Outcomes of the project: New model and service designed to query the database, which is largely scalable Major Learning Outcomes: Learnt to develop a xml model and service from scratch in java, and to query on ElasticSearch using Kibana interface. Also learnt about importance of maintaining scalability, and how to do so. Brief Description of working environment, expectations from the company: A wonderful working environment, with extremely helpful and friendly team members, mentor and manager. Great learning experience for me, even with no previous experience in proper software development and engineering Academic courses relevant to	2017- 18- sem1
Amazon Development Center, Delhi	Amazon Gurgaon has two major teams - Access Point Technology and Last Mile Technology teams - both dealing with the customer delivery experience. I was in the Access Points team which is mainly responsible for developing and maintaining the front and back end systems for alternate delivery points like lockers, stores, etc. collectively known as access points. Mt first task was to extract the demand, availability and rejection metrics for access points from the retail checkout page, which had previously been lost due to roll out of greying out feature. I used a lot of tools and service to emit the metrics and automate the data pipeline to finally store the data on a platform where the business team could easily query and analyze it. Apart from this, I was given a second project where I had to generate and persist order vs delivery day probability curves from home shipments data to be used for predictions and reservations for lockers at ZIP-5 level. This task included programming in Java along with use of AWS libraries to store the generated curves in Dynamo DB. Tools used (Development tools - H/w, S/w): Excel, Git, IntelliJ. Amazon tools - EMR, EDX, Redshift, ETL, Dynamo DB, S3 Objectives of the project: To emit and pipeline demand, availability and rejection metrics got lockers Outcomes of the project: Successfully stored the metrics in Redshift clusters where it is being used by the business team to analyze lockers in various regions. Major Learning Outcomes: Got to learn Perl, git, data storage and design patterns. Brief Description of working environment, expectations from the company: The working environment at Amazon is amazing. Everyone is very friendly and helpful. I got to learn so much from my peers. There are no strict working hours at Amazon and people are allowed to work according to their own schedules. There is also option of working from home sometimes. Amazon provides with all the basic facilities for a better working experience. The workload is not very consistent, so peak times can be very tir	2017- 18- sem1
Amazon Development Center, Hyderabad	I had to implement two projects including implementation of AWS(Amazon Web Services) end-to-end.  These two platforms were implemented for the first time in the team's project. These were implemented with complete end-to-end successful testing Tools used (Development tools - H/w, S/w): Java, AWS, Testing tools such as- Mockito, JUnit, etc. Objectives of the project: To provide two end to end implementations of AWS service - SQS, DynamoDB Outcomes of the project: Covered two major features for the Team Major Learning Outcomes: Java, AWS, deep diving, team work Brief Description of working environment, expectations from the company: Tough, hard at first, need to have a nice team to survive.	2016- 17- sem1
Amazon Development Center, Hyderabad	Made a dashboard for sellers about the products being returned to them. Worked on design, backend, front end and testing. Tools used (Development tools - H/w, S/w): AWS Tools- Kinesis, DynamoDb Objectives of the project: To make a new page on Seller Central website Outcomes of the project: Made a new page on Seller Central website Major Learning Outcomes: Database and UI Brief Description of working environment, expectations from the company: Competitive and deadline based working environment with a flexible working time as long as deadlines are met.	2016- 17- sem1

Company	Experience	Year
Amazon Development Center, Hyderabad	Extensive software development in Java and integration with Amazon technologies like Coral, DynamoDB, SWF, S3, etc. Software development includes deep-diving, designing, modelling, coding, testing and deploying. Objectives of the project: Standardization and Automation of Marketplace Category Expansions Outcomes of the project: Found parity issues in metadata and added automation features for Atom Major Learning Outcomes: Software development, Amazon Web Services (DynamoDB, SWF, S3) Brief Description of working environment, expectations from the company: The work culture at Amazon is excellent. People at Amazon take complete ownership of their work and also expect newcomers to do the same. This also helps them to push their limits. They are very helpful but also encourage independence. It is a five-day per week schedule and the timings are very flexible.	2016 17- sem
Amazon Development Center, Hyderabad	Worked on multiple projects. Core projects involved Document Verification using Deep Learning and Computer Vision. The secondary project was based on Big Data Visualization and Data Mining. Tools used (Development tools - H/w, S/w): Hardware was standard array of AWS EC2 instances, mostly m4.2x large instances and a couple of p2.4x GPU instances for the convolutional neural network training. Software was very disparate, including a lot of internal tools and technologies. But generic softwares like Spring and Give for Dependency Injection, Maven-like internal build system, Elasticsearch for data indexing, Several generic Java libraries like Lombok, Jackson etc were used. I coded in Java, C++ and Python. Objectives of the project: Building of a Document Verification system, Building of a Reporting and Analytics Platform. Outcomes of the project: All the projects were completed and delivered Major Learning Outcomes: Exposure to industrial coding practices and Learning to code scalable code. Details of papers/patents:Patent for the usage of Convolutional Neural Networks for document verification using optimized algorithms on Intel's AVX 512 Processors. (Pending) Brief Description of working environment, expectations from the company: Environment varies with different teams. Coding Deadlines have to be met. Scrum Meetings happen regularly. Working Hours are long unfortunately.	2016 17- sem
Amazon Development Center, Hyderabad	1) Development and maintenance of an Internal Service of Amazon. 2) Development of an API for internal use of the team. 3) Designing and developing a data pipeline to move data from DynamoDB to Oracle based DataWarehouse, using AWS services Tools used (Development tools - H/w, S/w): AWS services, JAVA, Spring Objectives of the project: 1) Development and maintenance of services used in amazon internally. 2) Development of a Data Pipeline to move data from Dynamo to Data Warehouse Outcomes of the project: 1) Enabled export of data from Dynamo to Data Ware House. 2) Improved performance of an existing API. 3) Working of an Internal Amazon service was modified and improved Major Learning Outcomes: 1) AWS services. 2) Spring framework. 3) Unit-testing Brief Description of working environment, expectations from the company: The work depends on the team assigned. The workplace is good and the environment is really friendly. Try to get as much work done and try to learn Amazon's coding practices fast Mentor NAME: SOMESWARA DIXIT Designation: Manager, ATEG Feed back on K Hari Manikanteswar Reddy: Hari's work is going to improve efficiency and effectiveness of Architecture Validation collateral. Some of the work he completed will be deployed to ARM architectural partners in this quarter. Hari has a good basic knowledge in computer architecture and he is quite good in understanding new concepts. Throughout our interactions, we get an impression he is keen to learn more and more importantly, asks relevant questions to get deep insights into ARM architecture. Rating: 9/10 Faculty NAME: GYANAN Comments: Expectations from industry: a) course requirements: (i) Advanced computer organization architecture (ii) VLSI design and architecture (iii) hardware software co-design. b) Hardware and software tools: (i) Perl (ii) Tcl (iii) Python (iv) Unix shell scripting (v) Verilog (vi) Perf tool GCC, ICC and LLVM Compiler (vii) cadence (viii)H-spice c) Soft skills (i) Proactiveness (ii) Team work (iii) Good communication skills Student	2016 17- sem
Amazon Development Center, Hyderabad	worked on the internal debugging portal for MYP team Tools used (Development tools - H/w, S/w): Android Studio, Espresso, UIAutomator Tools used (Development tools - H/w, S/w): Coral, java, Guice. SpringMVC, horizonte, jsp Objectives of the project: Outcomes of the project: Add new features to the internal debugging portal Outcomes of the project: Added 2 new features to the interal debugging portal Major Learning Outcomes: learnt google guice and spring mvc frame work and got an insight on industrial level coding Brief Description of working environment, expectations from the company: The team i was working with was shifting from traditional relational databases to amazon dynamoDB. as part of it there is a need for new debugging portal to make the oncall work easy. here i have added two new features to he debugging portal Academic courses relevant to the project: DBMS, Object oriented programming, OS	2017 18- sem

Experience Year Company I worked on 3 projects during my PS term. First was a UI to enable Amazon Sellers to create promotions for their products, which involved working with Play Framework and programming in Scala and JavaScript. Concepts involved were REST, understanding of MVC frameworks, good sense of user experience. Second project was a notification service for sellers. I used a service framework internal to Amazon, and used multiple AWS services. I collaborated with a team in the US for using a service made by them for delivering email notifications. Programming language used was Scala. Last project was a Visualization tool used for debugging purposes. I had to gather data from DynamoDB tables in different AWS accounts and make an API call to an internal team service to get the relevant data. This tool was made in Play Framework using 2017-Amazon Development Scala. Tools used (Development tools - H/w, S/w): Play framework, Scala, AWS, Cloud-based desktops 18-Center, Hyderabad Objectives of the project: Making it simple and convenient for Amazon Sellers to use the UI and sem1 notification service. Outcomes of the project: Great reviews by Amazon sellers on the UI, notifications being successfully sent to sellers. Outcomes of the project: Writing production level code, working with and debugging a large code base, programming frameworks, architectures, application design. Brief Description of working environment, expectations from the company: Working environment is great, infrastructure commensurate with one of the biggest companies in the world. Sometimes interns are required to put in more hours than usual. However, it ensures exposure to pressure situations in careers. Academic courses relevant to the project: Computer Networks, OOP, Principles of Programming Languages. Implemented ADSP Document Screening Handler Service, the API which accepts documents from external resources for document screening. The screening process of document is implemented as a workflow as ADSP is distributed system and implementing workflow has a lot of advantages. DSH services invokes the workflow and stores the screening request details in the DynamoDB Table. The operation SubmitRequest accepts documents for screening and then validates the document to make sure if the document complies with the minimum requirements needed to get screened and starts the workflow followed by storing the document screening request details stored in DynamoDB with the initial status of the screening request œSTARTED. After the entire workflow is invoked and finishes the screening of the document submitted the DSH Service gets the score of the document from other component of ADSP and then the service updates the model of the document screening request. Tools used (Development tools - H/w, S/w): Java, 2017-Amazon Development Google Guice, Junit, Mockito Tools used (Development tools - H/w, S/w): Implemented a coral service to 18-Center, Hyderabad accept the document requests for screening and execute workflow. Objectives of the project: Outcomes of sem1 the project: Great reviews by Amazon sellers on the UI, notifications being successfully sent to sellers. Outcomes of the project: The service developed will be able to start the screening workflow on documents submitted by Amazon sellers to check for legitimacy. Major Learning Outcomes: Clean Coding, Unit testing and Integration testing. Brief Description of working environment, expectations from the company: Launch plan sent by my manager helped me learn Amazon tools and process of developing and deploying the service in Amazon. I had a very supportive work environment at Amazon. My manager, mentor and the other team members have constantly encouraged me, provided valuable guidance and support for the successful completion of the project work. The team expected that I adhere to their coding guidelines and write quality code. Academic courses relevant to the project: OOP, DBMS, Image Processing. I implemented a service containing two API's which accept request id's from another component for performing a series of screening checks on documents. The service has been implemented as a distributed system. Implemented the service using DynamoDB and Simple Workflow Service. Additionally, I worked on image processing tasks using OpenCV and AWS Rekognition. Tools used (Development tools - H/w, S/w): Java, XML, Guice (Dependency Injection), Junit, Mockito, DynamoDB, SWF, Rekognition, OpenCV Objectives of the project: Outcomes of the project: Implement a Coral Service to execute a workflow that 2017-Amazon Development stores the screening request and status in a DynamoDB table. Outcomes of the project: Successfully 18-Center, Hyderabad implemented the service which forms a essential part of an upcoming product. Major Learning Outcomes: sem1 Learned distributed computing, image processing and NoSQl database concepts. Additionally learned to write quality code and the importance of testing. Brief Description of working environment, expectations from the company: Amazon has a great work culture. Team members and managers are helpful in all ways. Good place to learn and grow as a software developer. Our team has high work expectations and more results to be delivered in a single sprint. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms

Experience Year Company Invoices are issued between Amazon and third-parties to indicate the amount owed in exchange for services provided. This service provides the platform for validation of invoices from third party carriers to Amazon in exchange for transportation of goods provided as a service. Usually these invoices are sent from service providers to Amazon. These invoices are validated before passing to payments. This service is implemented as a Java package and spring application framework code is used for the web application. Mockito and JUnit are used to write and test the test cases for the source code of invalid service. This package has some dependencies on other packages. These changes are required to make the service as complete and error free. Legal compliance validation rules are essentially needed in the compliance validation changes. New validation rules are added to support Compliance Validation. Reporting actions 2017-Amazon Development are also added to support rule validation failures in Invoice Validation Service. Git commands are needed to 18-Center, Hyderabad send the changes made locally. These changes are deployed finally by using git commands. During the sem1 course of my internship, I worked on DynamoDB, SQS, AWS tools. Tools used (Development tools - H/w, S/w): Java, Mockito, JUnit, Spring framework Objectives of the project: Outcomes of the project: Enhancing Invoice Validation Service Outcomes of the project: Compliance Validation rules are added to Invoice Validation Service Major Learning Outcomes: Industry coding, Object Oriented Programming Brief Description of working environment, expectations from the company: Amazon has a great work culture. Team members and managers are helpful in all ways. Good place to learn and grow as a software developer. Our team has high work expectations and more results to be delivered in a single sprint. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms Worked on building an SOP Automator (Standard Operating Procedures) Tools used (Development tools -H/w, S/w): IDE -eclipse, intellJ Amazon specific build tools Objectives of the project: Outcomes of the project: Implement a Coral Service to execute a workflow that stores the screening request and status in a DynamoDB table. Outcomes of the project: The Project went into Production Major Learning Outcomes: 2017-Amazon Development Learned distributed computing, image processing and NoSQl database concepts. Additionally learned to 18-Center, Hyderabad write quality code and the importance of testing. Brief Description of working environment, expectations sem1 from the company: I had a very supportive work environment at Amazon. My manager, mentor and the other team members have constantly encouraged me, provided valuable guidance and support for the successful completion of the project work. The team expected that I adhere to their coding guidelines and write quality code. Academic courses relevant to the project: DBMS, Image Processing Self-Service portal for operational monitoring and automating macros in Data collection Excel tool. Excel macro automation: If a set of excel templates have same macros, change of macro code in one template should be reflected in other templates. This process is to be automated instead of manually changing each template. This would make development process much faster and less tiresome. Self Service Operational Portal: An internal team portal to enable the business team and on-call to monitor and do simple configuration changes to the VISA product, starting with Filing and expanding to Registration.) Tools used (Development tools - H/w, S/w): Amazon EC2, AWS Services, Spring Framework, Apache libraries. Objectives of the project: Outcomes of the project: Automating macros in Excel, Internal Team Portal. Outcomes of the project: Reduction of day to day manual work. Major Learning Outcomes: Writing proper code with test cases, Improvement in Deep Dive Skills Brief Description of working environment, expectations from the company: Your entire internship experience depends on the team you are a part of. Although my team was very helpful, I felt that the workload was quite high. Also, you'll have to 2017-Amazon Development communicate a lot with your team members to get your work done. Academic courses relevant to the 18-Center, Hyderabad project: Object Oriented Programming. Mentor Designation: Director R&D Work done by the Student, sem1 interactions with them: Shubhi primarily worked on developing test scripts for display module. She also worked on analysing and documenting ioctl calls between userspace and kernel. Highlights of major achievements, outstanding student characteristics: We would like to appreciate the way she went around with the tasks assigned to her. She took up any task assigned to her, she™s very well motivated and tries to get the work to conclusion. Takes feedback and is eager to learn. What we look for in interns: We don™t expect any particular expertise from interns. But few things that can be improved: i. Better grasp on programming languages and computer science basics. ii. Prepare them on practical front. E.g.: Generic Linux usage, command line usage, Embedded systems basics, etc. iii. Improve PS application process to give students an idea of what they can expect to work-on after joining any given organization (may be feedback taken from older students can be provided to applicants). Finally, really appreciate the effort BITS has taken in terms of Practice School. I feel PS gives Students an experience of the real-world work environment. This will surely help the students in deciding on their future goals. Student

Company	Experience	Year
Amazon Development Centre,	The objective of building UI based Data Migration Utility is to assist in migration of service provider data. Service provider data currently resides in G2S2 and TPV. However, the data here resides in an unorganized and scattered manner. It is entirely impossible to migrate the entire data in G2S2 in an automated manner because of the scattered nature of data in it. An automated process will only be able to migrate 30% of the service provider data available, for the rest 70% data we are left with two options: 1. The first option would be manually map the data to the entity model by looking up in G2S2, prepare per carrier document and then persist it in the SPDA. 2. The second option is to provide a UI to a valid person who would enter the service provider related details and then utility in the background would persist it in the database (as of now S3) and then the information would eventually be stored in SPDA. The web application would serve the purpose listed as second point. Tool used (Development tools - H/w, S/w): Java, Horizonte (Spring MVC based web framework) back end development platform, JUnit 5 testing framework, Mockito, HTML 5, CSS and AmazonUI for front end development, AWS resources like S3, DynamoDB, SQS. Objectives of the project: Full stack development from scratch. Major Learning Outcomes: The main learnings that were achieved within duration of training period: • Horizonte (Spring MVC based web framework) backend development platform. • Junit 5 testing framework. • Mockito for mocking dependencies. • HTML 5, CSS and AmazonUII for front end development. • Microservices architecture. • ACBDA pattern (Activity layer, Component layer, Builder layer, DAO layer, Accessor layer) very famous architecture for developing services. • Java Design patterns. • Abstraction favoring development by using interfaces and abstract classes in Java. • Working with AWS resources like S3 (Simple Storage Service), DynamoDB, SQS (Simple Queue Service). Brief Description of working environment, expectations from the	2018- 19- sem1
Amazon Development Centre,	We were required to build an API to query the database efficitently and build pages on the customer and businessoperations' end. I also pulled hard code out of a page and so the new page loads data from configs. Tool used (Development tools - H/w, S/w): Intellij, Sublime text, Jsp, Spring Framework, Ruby on rails, Angular JS, HTML, CSS, Company provided Mac and a cloud desktop for development. Objectives of the project: The project was to enable search on invoice db, and to produce search and details pages for the same. Major Learning Outcomes: Experience Indian work culture, and to work at scale with industry standard tools. Academic courses relevant to the project: CS f211 - Programming in Java	2018- 19- sem1
Amazon Development Centre,	Full Stack Development. Developed a full-fledged web application in java, jsp, Rest API and Spring MVC Tool used (Development tools - H/w, S/w): Java Objectives of the project: Web Application Major Learning Outcomes: Full Stack Development. Brief Description of working environment, expectations from the company: Developed a full-fledged web application in java, jsp. Rest API and Spring MVC Academic courses relevant to the project: DSA	2018- 19- sem1

Experience Year Company Amazon is a company that has a huge e-commerce business in India as well as rest of the world. So, there will be a lot of things that the SDEs have to take care. The Operational Excellence has a big part for the company to function properly. Operational Excellence or OE as it is called sometimes, is a commitment to engineer things right and make sure they run well. If we are good at OE we get to spend the bulk of our time innovating and building new capability for our customers. The reference to right things is a series of practices that result in properly running systems, a balanced workload for you and your team, and most importantly a great customer experience. My work is mainly on Metrics and Alarms. Tool used (Development tools - H/w, S/w): Java, iGraph Objectives of the project: 1. Publishing metrics for handle Type (PSP or Bank) Whenever we get issues or exception counts more due to timeouts, we do not have a way to find out which PSP or bank is down and we need to look into logs for the same. Instead, we can publish metrics for the handle Type in such cases. This also helps us to analyze which PSP is behaving good 2018-Amazon Development or bad and their success rate, etc. 2.Graphical view or Dashboard - This helps us to visualize the executions 19-Centre, Bangalore easily and find exceptions/input/output/plugin behavior, etc. and see if there is any useful information for sem1 us. 3.Once we achieve the above 2 points, we can see how this can be fed into all existing timeout exceptions/failures ticket/alarms, So, that the person on-call does not need to look into dashboard separately to find out which handle is down. 4. Create Sonar templates. Major Learning Outcomes: The first learning is understanding how UPI payments work and the internals of it. It is very fascinating to learn about it as it is going to be a huge deal in India in coming years. I also learned how to create metrics and create a dashboard new page and make them visible in the page. Then I also learnt how to add alarms and create monitors for them so that we can use them to cut a ticket or automatically send a mail to the respective authority to check the issue. Learnt how to analyze properly, like, what are the things I have to take care before changing the logic and structure of the ticketing system. Academic courses relevant to the project: OOPs, DSA, DAA My project on Generation of Reports included producing reports which analyze the performance of Amazon's new payment method, PayCode. Since PayCode is a payment method that caters to a new customer segment, which depends on their local currency as a means of payment, it is important for the business, accounting teams to capture and understand the performance of this payment method in the market. Hence, it is important to generate reports that capture the details of the performance of this payment method. The Simple Issue Router is a tool internal to Amazon that is meant to route the issue tickets allotted to Payment Services, to different teams in Payment Services, depending on the priority of the issue and the core of the issue. Tool used (Development tools - H/w, S/w): Software: Java Objectives of 2018-Amazon Development the project: PayCode is a new payment method as a part of Payment Services and aims to serve 87.1% of 19-Centre, Bangalore the customer segment that are unable to shop on the Amazon website due to unavailability of a sem1 conventional cash-based payment method. Therefore, in order to serve this customer base, these reports are required. Major Learning Outcomes: • AWS services like DynamoDB, Simple Timer Service, Simple Queue Service, Simple Notification Queue. • Amazon Coding Standards • Dependency injection and Guice framework • Testing and Mocks Brief Description of working environment, expectations from the company : The company expects its interns to deliver on time and do excessive research on their own. This company believes in high standards and there fore cannot compromise with quality. Academic courses relevant to the project: DBMS, OOPS, DSA Doing internship at Amazon is a great learning experience not only in terms of software domain aspects but also management, team work and coordinating with multiple teams. I was part of Your Memberships & Subscriptions team, which maintains a common platform where all the subscriptions of a customer can be managed. I got to work mostly in the backend web development. I worked with REST services, APIs and the development is mostly done in java. The complexity and velocity of the work increases with time during the 2018-Amazon Development span of internship, which challenges you to move out of your comfort zone. My team, especially my mentor 19-Centre, Bangalore was very helpful and guided me when I was facing any issues. Overall it is a good place for someone who is sem1 curious to learn. Tool used (Development tools - H/w, S/w): Java, Spring MVC, Junit, JS, JSP Objectives of the project: Multi factor authentication support for a customer via your memberships and subscriptions platform Major Learning Outcomes: Exposure to spring MVC, REST services Academic courses relevant to the project: None

Experience

**Faculty Student** 

The first task was related to automate certain jobs which were done manually before. Second task was to write spark jobs for generating IP metrics related to sponsored products and display ads. Third task was to build a UI for querying the IP metrics, which included frontend and backend development. Tool used (Development tools - H/w, S/w): Scala, AngularJS, NodeJS, AWS services (Athena, S3, Lambda). Objectives of the project: In Traffic Quality team, there is a use case where we need to monitor the performance of an IP/IP Range. Merchant escalation is one of the use cases. Today the team monitor IP specific performance by doing manual analysis, which requires writing multiple scripts. We want to automate this process wherein we can see the IP/IP Range performance on the user interface. In order to monitor IP historical performance on UI, IP data warehouse is built wherein IP aggregated data on daily basis will be kept. This IP data can be further used in building the guardrails checks for addition/removal of an IP/IP Range in SNL. 2018-Amazon Development IP Aggregator jobs were written (for both Display Ads & SSPA) for 1Day and 7Day conversion attribution, 19-Centre, Bangalore which will generate aggregated key metrics for each IP and store data into the warehouse. This IP data can sem1 be used in UI to monitor the historical behavior of an IP/IP Range. Major Learning Outcomes: Languages:

Name: Tripuramallu DSK Sarath (2014B3A70576H)

JS, Scala Frameworks: NodeJS, AngularJS. AWS Services: S3, Athena, Lambda and building chrome extension. Tool used (Development tools - H/w, S/w): Hardware: MacBook pro i7 Software: AWS, Dependency injection frameworks, Java, Python Objectives of the project: Enhancements in notification system Major Learning Outcomes: Payment platform architecture, Design patterns, SOLID Principles, DI frameworks, AWS, Agile practices, Scalability, Improvement in documentation and communication skills Academic courses relevant to the project: Object oriented programming, Software Engineering, Software Development for Portable Devices, Data structures and Algorithms, Design and Analysis of Algorithms

As part of my internship, I was given multiple tasks related to the problems associated with the services that my team owns. Most of them involved the root causing the issue and providing a fix for the same. As part of this process, I had to quickly familiarize myself with the frameworks used as well as the actual business logic that went behind the implementations, as there wasn't much documentation associated with it. I was also given the opportunity to develop some new features to the existing systems which involved collaborative efforts in coming up with the design, then implementing it from scratch and finally testing the changes. Tool used (Development tools - H/w, S/w): Java, Spring MVC framework, JSP, JavaScript, Hibernate ORM, PostgreSQL, git, Amazon internal tools (build, deployment, dependency management). Objectives of the project: To provide support to FaaSTInvoiceService to generate multiple ewaybills associated with an AmazonNow order's shipment. Major Learning Outcomes: 1. Agile principles: a. Having daily stand-ups where one gives an update of their progress/ blockers. b. Having sprints planning where we have a dedicated time setup to plan the activities and tasks to be done. 2. Design and code reviews: As part of the development stages, a design of the solution is first prepared and reviewed by the senior SDEs in the team. Then the solution is implemented, tested locally, and is reviewed by the senior SDEs in the team. Technical: 1. UML Diagrams: These are very effective ways to give an overview of the solution and are key to having great design reviews and discussions. 2. Design patterns: These are general, reusable solutions to a commonly occurring problems and are used almost everywhere. 3. Java 1.8: We made use of key features of Java 1.8 like streams and lambda functions which helped in writing efficient, clean and more readable code. 4. Clean code: This encapsulates many things like following good naming conventions, using fewer blocks of code, using in-built programming language functionalities, etc. This would increase readability which in-turn makes it easier to review and maintain the systems. Brief

Description of working environment, expectations from the company: The work environment is very flexible. One does not have any specific timings in terms of coming to the office or leaving it, but one is definitely expected to deliver the projects in a timely manner. The team is very supportive in terms of helping a fellow teammate to debug issues. Your manager and mentor are there to cater to any issues you might face which are a great help, especially at Amazon, as all the dev-ops tools are internal. Academic courses relevant to the project: Data Structures and Algorithms, DBMS, Computer Networks. Hyderabad

2018-19sem1

Year

Centre, Bangalore

Amazon Development

Company

Company	Experience	Year
Amazon Development Centre, Delhi	The work required to develop from scratch, the user interface and backend for the Approvals System within Amazon specifically for one of Amazon's vendors. This required to provide custom functionality according to the use case of the vendor. The front end was in Ruby on Rails and AngularJS while the backend was in java based on SOAP architecture. I also worked on Spring Framework and databases for the project. Since the project was based on micro services architecture, it allowed me to work on multiple services and their efficient coordination to reduce operational latencies. Other technologies used were Amazon SQS for listening queues and AWS for hosting purposes. Tool used (Development tools - H/w, S/w): Java, AngularJS, Ruby on Rails, Linux, HTML, CSS Objectives of the project: To develop Invoice Custom Approvals Workflow Major Learning Outcomes: Microservices Architecture, Messaging queues Brief Description of working environment, expectations from the company: Working environment is pretty good. You are allowed to work at your comfort as long as you deliver result. The hierarchy itself is pretty flat and you can approach and share your ideas with pretty much every one. The development is fast paced and there is a lot to learn. You'll be treated as a full employee and given the work of a full employee without any discrimination. I am very well satisfied with the kind of work I've got. Academic courses relevant to the project: Object Oriented Programming, Computer Programming, Data Structures and Algorithms, Database Systems.	2018 19- sem1
Amazon Development Centre, Gurgaon	I joined my intern at Amazon on 13th July 2015 as software development engineer-intern. I was fortunate enough to work on some cool projects, which helped me grow as an engineer by developing my core skills and knowledge. This was a great opportunity for me to bring my coding standards at par with the essional world. The discussions with my peers, regarding the designs have provided me with deep insight to OOP principles. I have learned that it is important to be biased for action; there can be N number of solutions to a problem but we got to choose that is the best for us, both in terms of resources and sustainability of the code. The technologies that I have worked on-Java, Dynamo DB, SQS, and other AWS tools, UI frameworks like AUI, etc.will provide me an edge in my career ahead. Today everyone is using these Amazon tools to get their work done in a simpler and easy way, having a good understanding of these will enable me to mark out my presence among others. There are very talented people at Amazon, I make sure to read the code written by them as it not only makes me understand-how, when and why to use features of Java but also introduces me to some new Java8 features-like streaming functionality. To conclude, I will say, the practice school program of BITS is simply awesome. This provides us with the opportunity to implement what we learn in college. It also gives us an environment, where we can dive deep to understand how things are working in essional world and make our decisions wisely for our career ahead. I will say these six months should be used to make mistakes, learn and grow from them, have a thorough understanding of our subject, so that when we enter our industry as fullfledged engineers, with BITS-Pilani degree to back us up, our peers should have nothing but respect and appreciation for us. In short, the goal for internships should be nothing but essional excellence	2015 16- sem1
Amazon Professional Services , Bangalore	Security access to all the resources on aws cloud is managed through policies. Often these policies grant excess rights to the user which is a big security concern. My project aimed to create a service which automates the process of minimisation of access rights. Second project was aimed at contributing to AWS open source libraries where we had to make automation documents which automate the remidiation of non- compliant resources in an organisation. Third project was engagement in a migration of large scale real asset service provider's onprem infrastructure to cloud. Tool used (Development tools - H/w, S/w):  AWS SERVICES (IAM, S3, Lambda, Glue, Cloudformation, Aurora) BOTO3 Python Objectives of the project: Automation of minimisation of policies Major Learning Outcomes: Cloud infrastructure and services  Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Computer Networks	2019 20- sem1
Amazon Professional Services , Bangalore	The work involved was targetted at developing automation tools for various use cases within AWS. The tools were developed by using native AWS services in tandem with external resources. Tool used (Development tools - H/w, S/w): AWS Services, Python Objectives of the project: Develop Automation Tools using AWS services and in the process gain familiarity with AWS and it's services. Major Learning Outcomes: Knowledge regarding AWS services, Automation, Tools for Relevant use cases Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Computer Programming, Data Structures and Algorithms	2019 20- sem1

Company	Experience	Year
Amazon Professional Services , Bangalore	Built an end-to-end system to generate Lex chatbots to answer questions about the information in a given set of web pages. The system allows a user to input URLs of web pages or upload text documents into the system, the web pages are scraped for relevant text data which is normalised and preprocessed. The system then generates QnA from the prepocessed text and indexes the QnA into an Elasticsearch domain. Meanwhile, the system also builds and configures a Lex chatbot with corresponding intents and utterances to handle conversation with a user asking questions about all of the topics corresponding to the given web pages. The system provides a frontend for the user to chat with the chatbot. When the user asks the chatbot a question on a topic, the most relevant answer to it is fetched from the Elasticsearch domain and presented to the user, who can choose to continue QnA operation for as long as he likes before exiting. Tool used (Development tools - H/w, S/w): AWS services - such as AWS Lambda, Amazon Lex, Amazon Elasticsearch, AWS S3, SAM. Natural Language Processing - spaCy library, python-boilerpipe Objectives of the project: To build a dynamic chatbot system with Amazon Lex which can read and understand the unstructured data content from any given document set, create the intents and utterances programmatically, and answer user queries at application run-time using a natural Major Learning Outcomes: Working on the project has given me a thorough understanding of several AWS services - such as AWS Lambda, Amazon Lex, Amazon Elasticsearch, AWS S3, IAM, Cognito, API Gateway, SAM - as well as a good practical understanding of natural language processing Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Information Retrieval	2019- 20- sem1
Amazon Professional Services , Bangalore	The goal of the project was to help customers optimize their cost on AWS services. To accomplish this, I developed a data pipeline that can process large amounts (potentially 30-40 GB) of data. The data pipeline took inputs from billing data, utilization metrics data and custom sources and combined them to give a holistic picture of usage vs cost. The pipeline also used an existing powerful search and visualization tool to help the customer explore the data graphically. Tool used (Development tools - H/w, S/w): AWS Glue, AWS S3, AWS Elasticsearch, AWS Lambda, Cloudformation, PySpark Objectives of the project: Develop a data pipeline for optimizting cost Major Learning Outcomes: - Learning the AWS infrastructure and how different services interact in the ecosystem - Learning the best practices of designing serverless architectures - Using big data tools - Understanding real world problems faced by customers Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment was comfortable and conducive to learning and exploration. My colleagues were experienced, knowledgeable and always available for help. The projects were well defined, with clear goals and end user applications. The company's expectation from interns was to learn in broad strokes and understand the culture of the company. Academic courses relevant to the project: Information Retrieval, Data Structures and Algorithms, Computer Networks Student	2019- 20- sem1
American Express - Big Data Labs	Created a short noisy text analytics portal Tool used (Development tools - H/w, S/w): Python, Django, Numpy, Sklearn, keras, HTML/CSS/JS Objectives of the project: Understand customer textual data in a fast and organized manner Major Learning Outcomes: Applications of NLP on noisy unstructured enterprise data and presenting results to stakeholders Academic courses relevant to the project: Machine Learning, Neural Networks and Fuzzy Logic Name: Pranav Kumar Asthana (2015A7PS0961H)	2018- 19- sem1
American Express - Big Data Labs	I was in the unstructured data analytics team of the lab. My work involved researching and coming up with techniques for automatic text summarization. This was used for template based extractive text summarization of their customer interaction data, ie, customer care chat and call transcripts. This was done to draw insights about customer interaction and customer care violations. Tool used (Development tools - H/w, S/w): Python, other libraries for NLP, ML Objectives of the project: Research and tool development Major Learning Outcomes: Research methodology Details of Papers/patents: None yet. Brief Description of working environment, expectations from the company: Working environment is not very fancy. Minimal office(in terms of facilities), moderate interaction between colleagues, very few young people in the lab. Academic courses relevant to the project: Information retrieval, machine learning, artificial intelligence	2018- 19- sem1
American Express - Big Data Labs	I worked on the research and development of gradient boosting library XGBoost which is used to detect fraud Tool used (Development tools - H/w, S/w): C++, Python, Valgrind, GNU Profiler Objectives of the project: Add multiclass classification Major Learning Outcomes: How development on a large scale machine learning algorithm is undertaken Academic courses relevant to the project: Machine learning Student Name: Krishna Teja Nunna (2015A7PS0024H)	2018- 19- sem1

Experience Year Company I did work related to Unstructured Document Analysis and Question Answering. Basically, for any NLP task on documents, the first step is to get some representation of it and apply task specific models on it. This representation should be structured (unlike raw documents) to be consumable for algorithms. So, my task was to convert documents into a structured format (jsons) preserving layout and content. i used different heuristics and instance segmentation for the same. Next project was to perform Question Answering on Financial Statements. The problem statement was to answer questions based on a given paragraph. So, in this financial documents were first converted into jsons. Next, I generated a dataset of of questions and 2019-American Express - Big Data answers from FS and trained reading comprehension models on the same. Tool used (Development tools -20-Labs (BDL), Bangalore H/w, S/w): H/w: Linux, Nvidia GPUs (single and cluster) S/w: python, pytorch, tensorflow, keras JavaScript sem1 Objectives of the project: Convert raw documents (Unstructured) into structured representations. Automate the task of answering questions posed by analysts in financial domain. Major Learning Outcomes : Natural Language Processing, Natural Language Understanding, Computer Vision Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Machine Learning Neural Networks and Fuzzy Logic Information Retrieval Data Mining Worked on adding features to a machine learning algorithm. Work required going through research papers and understanding new concepts and then applying them in the algorithm. Mix of software development and machine learning. Also worked on business aspect of explaining the features to business stakeholders in terms of business metrics and need for the features. Tool used (Development tools - H/w, S/w): Jira, Stash, Spark, Jupyter, C++, Python Objectives of the project: Add new features to machine learning algorithm. Benchmark multiple algorithms. Research into the explainability of machine learning models Major Learning Outcomes: Understanding a huge code base. Thinking of design before code. Reading and understanding multiple research papers. Working in a team. Using tools like stash,git. Understanding how to apply researched features to business problems. Details of Papers/patents: Brief Description of working environment, expectations from the company: Great working environment. Freedom to work at own timings. Responsibility comes with the freedom. Great supportive team to work with. Growing team. 2019-American Express - Big Data Lots to learn. And very friendly and knowledgeable team. Company also growing in Bangalore location. 20-Labs (BDL), Bangalore New projects keep coming in. Working in the latest and the most sought after fields in AI research. sem1 Academic courses relevant to the project: Machine Learning, OOP, Data Science, Computer Programming, DSA Brief write-up on PS-II station: American Express, also known as Amex is an American multinational financial services corporation headquartered in New York. The organization is best known for its credit card, charge card, and traveller's cheque businesses. Amex offers internship in various business units including Amex Technologies, Amex Big data labs and Amex capabilities. Students are exposed to project assignments based on predictive modelling, Modernizing the internal risk platforms, automation by designing and implementing web applications. Technology stack includes MySql, Hive, python, PySpark, and React etc. Organizations prefer students who have done courses like Artificial Intelligence, Machine Learning, and Deep Learning and have good hands on experience on python. Additionally, they prefer interns who are good researchers, eager to learn new stuff, open to work on different technologies and have excellent communication skills. Student Full stack project involving information retrieval, and creating a tool that reduces the manual workload of analysts by automatically recognising patterns within a dataset Tool used (Development tools - H/w, S/w): Python3, Node JS, HTML, CSS, JavaScript Objectives of the project: Full stack project involving information 2019-American Express retrieval, and creating a tool that reduces the manual workload of analysts by automatically recognising 20-Capabilities EDA, Gurgaon patterns within a dataset Major Learning Outcomes: Business terms and analytical terms and their sem1 practical meanings Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Data Mining

Company	Experience	Year
American Express - Capabilities EDA , Gurgaon	Automation of Multiple process in the team. Firstly, the Non AD Measurement automation with master input file and final output appended to the input which is 9 times faster than the prior process. Next, automation of SAC process in python by converting all the process which were before done in three different platforms with and efficiency of 18 times faster process. Tool used (Development tools - H/w, S/w): SAS Enterprise, Python 3, MLS Studio,Pyspark,Pandas, Winscp, Putty and Bokeh Objectives of the project: Automation of the process for error free and effective method Major Learning Outcomes: Data Extraction,Manipulation and data visualization Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Database management systems and datascience Intelligence, Gurgaon Brief write-up on PS-II station: American Express, also known as Amex is an American multinational financial services corporation headquartered in New York. The organization is best known for its credit card, charge card, and traveller's cheque businesses. Amex offers internship in various business units including Amex Technologies, Amex Big data labs and Amex capabilities. Students are exposed to project assignments based on predictive modelling, Modernizing the internal risk platforms, automation by designing and implementing web applications. Technology stack includes MySql, Hive, python, PySpark, and React etc. Organizations prefer students who have done courses like Artificial Intelligence, Machine Learning, and Deep Learning and have good hands on experience on python. Additionally, they prefer interns who are good researchers, eager to learn new stuff, open to work on different technologies and have excellent communication skills. Student	2019- 20- sem1
American Express - Machine Learning & Artificial	Used various algorithms to further business level predictions on spend by customers on their credit carda. Classification and regression algorithms were used. Recursive and greedy approaches along with divide and cobquer for enhancing predictions based on e semble trees and boosting random forests. Tool used (Development tools - H/w, S/w): Python, hive, mls. Objectives of the project: Predict incremental spend and average daily balance for small open to open us customers Major Learning Outcomes: Machine learning and modelling Details of Papers/patents: Brief Description of working environment, expectations from the company: Very great work environment. Treats interns at par with employees. Academic courses relevant to the project: Machine learning, NNFL, DBMS, fundamentals of data science Student	2019- 20- sem1
American Express - Technology , Bangalore	Developed a staffing solution portal using One App, a React JS framework of Amex. Also had to develop and demonstrate an end to end designed Big data pipeline involving Spark Structured Streaming. Tool used (Development tools - H/w, S/w): React JS, Java, Python, Kafka, Spark, Hadoop, PostgreSQL, Couchbase Objectives of the project: To develop a staffing solution portal and to demonstrate the end to end Big Data pipeline for real time transactional data analytics and visualisation. Major Learning Outcomes: Got to learn about react JS and system design behind a portal of an organization. Got to learn comprehensively about Big Data ecosystem Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: CS F213, CS F211, CS F320 Brief write-up on PS-II station: American Express, also known as Amex is an American multinational financial services corporation headquartered in New York. The organization is best known for its credit card, charge card, and traveller's cheque businesses. Amex offers internship in various business units including Amex Technologies, Amex Big data labs and Amex capabilities. Students are exposed to project assignments based on predictive modelling, Modernizing the internal risk platforms, automation by designing and implementing web applications. Technology stack includes MySql, Hive, python, PySpark, and React etc. Organizations prefer students who have done courses like Artificial Intelligence, Machine Learning, and Deep Learning and have good hands on experience on python. Additionally, they prefer interns who are good researchers, eager to learn new stuff, open to work on different technologies and have excellent communication skills. Student	2019- 20- sem1
American Express - Technology , Gurgaon	My first project is changing the companies invoice application code from .NET framework to AMEX framework which increases the UX of the web application. My second project is creating a Content Management System which helps in maintaining the other applications static code which helps in changing static data using our service without redeploying their code. Tool used (Development tools - H/w, S/w): React js, spring Objectives of the project: Improving the companies UX of all the applications and making DEV-OPS to change their applications static data with ease. Major Learning Outcomes: Ability to work with large codes, how to update code from one frame work to other. Details of Papers/patents: None Brief Description of working environment, expectations from the company: Healthy environment filled with passionate people trying to solve the most challenging technical problems Academic courses relevant to the project: None	2019- 20- sem1

Company	Experience	Year
American Express - Technology , Gurgaon	There were 2 projects assigned during this internship. First project was migrating a .NET application to NodeJs application. For this application I used ReactJs for front end development and Spring boot for backend development. The application is a self-service tool for suppliers to help them upload their invoices and get it processed by AMEX GSM operation team. Second project was Language Resource Service. Tool used (Development tools - H/w, S/w): IntelliJ idea, Webstorm, Git, Jenkins, XLR, ECP. Objectives of the project: To reduce the release time for an application and make it faster and simple. Major Learning Outcomes: Learnt about the web development and what all things needs to be done for taking a product to production. I also understood about how deployment works. Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: Working environment is pretty good here at Amex. Th projects are challenging, timings are flexible. All the team members are helpful. Environment is pretty interactive and to you can ask for help even outside the team, also you have the liberty to suggest your own ideas Academic courses relevant to the project: DBS, Programming Student	2019- 20- sem1
American Express -RIM-C, Bangalore	During my Internship at American Express - RIM-C, Bangalore, I've worked on converting various capabilities from SAS Platform to Big Data Platform in PySpark. This was given to us because Amex is moving towards Big Data Platform due to increase in customer base and the requirement of processing huge amounts of data. Apart from this, I've also worked on automating various complicated functionalities that are the proprietary tools used by Amex to analyse the behavior of a customer. I've also been assigned to create and maintain various databases specific to different modelling teams depending on their need and the model currently in use. Amex also gave me the flexibility to search for functionalities which were missing at the time that could make certain processes easier and gave me full freedom to work on it once the idea was discussed and approved. Works were diverted and divided among others so that I could implement it without any distractions. Working at Amex never felt like a challenge. The environment is amazing and the office is filled with amazing and sweet people who are always ready to help. I never felt like an Intern or an outsider there. I was always included in everything the used to do for fun and also in some of the meetings. I think each and everything that I've learnt in my PS-II, whether it be new technologies or communication and interpersonal skills, will prove useful to me in the future. Tool used (Development tools - H/w, S/w): PySpark, Hive, Java, SAS Objectives of the project: The objective is to recreate various capabilities existing in SAS platform in Big Data Platform using PySpark Major Learning Outcomes: Clear understanding of AMEX credit card services and card dynamics. Exposure to data management, Query Processing and Automation Processes. Brief Description of working environment, expectations from the company: Pleasant environment with friendly and ready to help teammates. Academic courses relevant to the project: OOP, DBMS, Machine Learning Name: Silpa Soni Nallacheruvu (2015A7P	2018- 19- sem1
American Express -RIM-C, Bangalore	End to end automation of Score Card processes and migration of processes to big data platform Tool used (Development tools - H/w, S/w): Hive, Pyspark, SAS,Python, Java Objectives of the project: End to end automation of Score Card processes Major Learning Outcomes: Clear understanding of Amex Credit Card Services and Card Dynamics. Got an exposure to Data Management and Query Processing in Hive. Brief Description of working environment, expectations from the company: Safe and pleasant environment and Friendly team mates who have been always in time of need. Academic courses relevant to the project: DBMS, Data Mining, Machine Learning Management, Center of Excellence, Gurgaon Faculty Student	2018- 19- sem1
American Express , Risk Information	My work was related to conversion of a cross platform SAS based process to a single Big Data Platform using the python API of Apache Spark - a big data clustering framework (known as PySpark). It also involved analysis of data using Apache Hive , a SQL based framework for querying and fetching Big Data. It was interesting to understand from a business perspective as the process i developed would be directly used to calculate Risk Exposure for the customers. Tool used (Development tools - H/w, S/w): Apache Spark (Python API) , Apache Hive , Hadoop MapReduce , MS Excel , Jupyter Objectives of the project: To Automate the computation of Risk Exposure and Credit Lines on Big Data Platform using PySpark Major Learning Outcomes: I learnt a lot about how Big Data processes work , how business logics are developed in credit card companies , corporate culture , handling work life balance. Major learning outcome was to experience how subtle changes in technological processes affect business outcomes. Details of Papers/patents: None Brief Description of working environment, expectations from the company: American Express has been consistently ranked among the best companies in India to work for and during my PS it was evident why. The work environment is great. There is a perfect work-life balance. The organization takes great care of its employees and prides itself for having one the best environments to work for. The work may be dull and not challenging enough sometimes but most of the times it is pretty interesting and one would enjoy working for the organization. Academic courses relevant to the project: Data Base Systems, Software Engineering	2018- 19- sem1

Company	Experience	Year
American Express , Risk Information	American Express is one of the most prominent financial organizations in the world. Here at the Gurgaon, India, Amex has its Risk & Information Management Centre recently rechristened to Credit & Fraud Risk - Center of Excellence. This is a unit of global importance to Amex as it helps the organization in predicting and preventing any kind of risk or fraud activities carried out on Amex network. As of now, CFR is under a major technological overhaul with legacy technologies being faced out and newer, more flexible and big data proficient technologies are being setup. So my projects revolved around migration and development of processes from older platforms and systems to the newer technologies. My projects mainly involved redesigning the existing systems based on SAS and RDBMS to newer, flexible and big data capable PySpark and Hadoop based systems. PySpark is the Python API for Apache Spark originally based on Scala. Spark is a highly proficient data analytical tool which can work well with clustering frameworks and distributed storage systems like Hadoop, to speed up the processes with large amount of data. I worked on two projects, namely - Automation of Model refresh process and the second, Case Review Generation Tool Enhancement. Tool used (Development tools - H/w, S/w): Apache Hive, PySpark, Python, Pandas Objectives of the project: Migration and Integration of processes from SAS based platforms to Hive and PySpark based systems. Major Learning Outcomes: Teamwork, Owning Responsibilities, Proficiency in handling Big data and big data tools, PySpark, Hive Brief Description of working environment, expectations from the company: Amex has been one of the best companies to work for -in India and the world as well for the past several years. This is a direct consequence of the work environment that Amex provides for its personnel to thrive. The colleagues are highly cooperative and support from the senior positions remains exemplary all the time. Some may find the work to be non-challenging but the work environ	2018- 19- sem1
AMRUT INTERNATIONAL	My current area of work revolves around the following areas 1) Optimization 2) Machine Improvement 3) Export Sales 4) Local Sales 5) Other Projects Tool used (Development tools - H/w, S/w): Microsoft Excel, Word Objectives of the project: OPTIMISATION OF MACHINE HANDLING AND LABOUR COST TO IMPROVE IN AUTOMATIC MACHINERY HANDLING AND TO SAVE LABOUR COST BY BETTER METHODS AND ADDING IMPROVISED MACHINERY AND IDEAS. Major Learning Outcomes: food industry. analysisexcel like Sorting, Charts and Table. of MIS (Management Information System) on a daily basis. Brief Description of working environment, expectations from the company: Helpful environment, good colleagues Academic courses relevant to the project: Mechanical Faculty Name: S S yedlapalli	2018- 19- sem1
Analog device	Verification of trans impedance amplifier block. Tool used (Development tools - H/w, S/w): Cadence Virtuoso Objectives of the project: Verify and test analog blocks Major Learning Outcomes: Familiarity with corporate world. Brief Description of working environment, expectations from the company: Do everything on your own. Mind this. Academic courses relevant to the project: Microelectronics circuits	2018- 19- sem1

Experience Year Company Worked upon the existing product of the CRM solution as SFA software hosted on web, mobile, tablets. In the field of Web Development we have worked upon a product for the existing and old client. We have tried to improve the Software Product. Mainly we have made the improvements in three dimensions: 1) Responsiveness (Key Feature); 2) UI & UX; 3) Performance. Responsiveness is an approach of web designing that will render (load) the web pages in such a way that web page looks in proper structure and attractive on all device width. UI & UX improvement was majorly for a new look to the product. We used bootstrap framework and along with some of the common theme based classes of CSS defined by me. At last we also implemented new technology for better performance overall. For that we used jQuery Library functions, AJAX implementation and some readymade plug-ins of jQuery. Tool used (Development tools - H/w, S/w): Notepad++, FileZila, Navicat, Google Chrome, Internet Explorer. Objectives of the project: 1) Make the existing CRM solution SFA software responsive to all devices; 2) UI-UX improvement; 3) Performance Improvement. Major Learning Outcomes: Front-end web development using HTML, CSS, JavaScript, Bootstrap, jQuery, PHP, MySQL. Brief Description of working environment, expectations from the company 2018-Anant Infomedia Pvt Ltd : First of all the timings were totally illogical and out of reasoning. They were 9:30AM to 6:30PM from 19-Monday till Saturday. They added normal 9 to 5 job lunch hour also as working hours. With no Saturday as sem1 holiday. Here the working environment was very below our expectations. We were given our stipends after 10th of the next month. And once for a month we were given our stipend of a month on 21st of the next month.Every time we were replied with new deadlines to be given for cheques with new and new nonconvincing reasons. The company has huge lag in providing a good and professional work environment. Also the work is done in very much pressure and discouraging mode. Our Project was not at all Managed Properly. We were planned to suggest and give more creative ideas in starting but eventually we were forced without any reasons to just meet the small small deadlines. The deadlines were quiet irrational along with that there seemed lack of experience of project management and efforts in setting the deadlines properly aligned to the amount of work. The proportion of deadline was mismatching with the amount of work. Which ended up us crossing the deadlines which brought even more pressure and discouragement. Academic courses relevant to the project: Database Management Systems Name: Sagar Malhotra (2015A7PS0030G) 1) Modified an existing CRM for Sales Force of a Pharmaceutical firm built using PHP, Javascript and HTML into a responsive CRM which can be accessed easily on all devices with different screen widths. 2) Made the CRM more efficient using AJAX in JQuery. 3) Improved the User Interface and User experience using HTML, CSS, Bootstrap Tool used (Development tools - H/w, S/w): Notepad++, FileZilla, Navicat MySQL Objectives of the project: To make an existing CRM responsive for devices with different screen widths and to improve the UI Major Learning Outcomes: Learnt Front-end Web development using HTML, CSS, Javascript, Jquery, PHP and MySQL Brief Description of working environment, expectations from the company: Working environment is way below expectation. Stipend was never paid on time with 12-15 days delay every month. Work hours are more than any average company with no holiday or not even half day 2018on Saturdays and one hour extra everyday than other conventional companies i.e 9:30 am - 6:30 pm. The Anant Infomedia Pvt Ltd 19company lacks good work culture and the work environment is quite pressurizing and discouraging. sem1 Moreover, there has not been any significant learning or career growth as the project allotted was based on Front-end Web development using HTML, CSS which is of very minimal use if one does not want to pursue Web-development field in future and also creativity in work is not properly encouraged and the focus is more on meeting the deadlines and completing the work. The company strongly discourages any breaks from work during work hours and the workplace is also not appreciable with no PC or Laptop provided for the work. Work load was way more than expected with heavy and irrational deadlines and lack of good Project Management led to a lot of pressure and discouragement. Academic courses relevant to the project: Database Management Systems (DBMS) Mentor Designation: Senior Scientist Comments: Good Performance, no issues overall Implemented and tested TPMS device in the tyres, studied the datasheet and firmware program for the chips involved in the device Tool used (Development tools - H/w, S/w): Sensor Chip, BLE chip, specific IDEs Objectives of the project: Increasing power efficiency Major Learning Outcomes: Hands on Board 2018-Apollo Tyres Global R&D experience, Industry Experience Details of Papers/patents: Brief Description of working environment, 19-Asia expectations from the company: Very supporting staff. The firm provides good industry exposure. Its a bit sem1 far from the city which is the only disadvantage Academic courses relevant to the project: Microprocessors and Interfacing, Microelectronics Circuits, C programming Name: Gopi Krishna Mendu (2015A3PS0285P)

Company	Experience	Year
Apollo Tyres Global R&D Asia	Reducing Bluetooth Low Energy(BLE) stack size used for Tire pressure monitoring system(TPMS), thereby increasing the battery life significantly. Resolved the issue the organization faced while trying to configure multiple TPMS devices to a single android application, by assigning unique MAC ids to different devices. Tool used (Development tools - H/w, S/w): MCUXpresso, j-link segger Objectives of the project: Reduction in stack size of BLE. Major Learning Outcomes: C and C++ languages, Industry Experience Academic courses relevant to the project: Micro Processors and Interfacing, C programming Name: Ankit Muthiyan (2014B5A30903G)	2018- 19- sem1
Apollo Tyres Global R&D Asia	Understanding and application of data analysis methods in R and MATLAB. Built a GUI using the App Designer for simplified data analysis. Tool used (Development tools - H/w, S/w): MATLAB, R Objectives of the project: To build an application for strain sensor data analysis using MATLAB Major Learning Outcomes : Data Analysis Academic courses relevant to the project: Singnals and Systems, Computational Physics, Programming Mentor Designation: Senior Scientist Comments: Good Performance, no issues overall	2018- 19- sem1
Apollo Tyres Global R&D Centre, Chennai	I created a Java GUI Application that connects to an RFID reader and enables the user to read the tags in the field of view of the antenna of the reader. The user can also apply singulation controls to filter the tags he/she wants to be read. Tool used (Development tools - H/w, S/w): Java Swing Objectives of the project: Building an Java app with RFID tag reading abilities Major Learning Outcomes: Learned Java Swing, SQL and basics of C++ Name: Chandrashekhar Koushik (2015A4PS0227G)	2018- 19- sem1
Apollo Tyres Global R&D Centre, Chennai	Work was related to Digital Signal Processing. Basically had to analyse accelerometer data and calculate certain parameters of the tire from it. Tool used (Development tools - H/w, S/w): R, MATLAB, Excel Objectives of the project: To calculate tire patch length Major Learning Outcomes: Digital Signal Processing Academic courses relevant to the project: Digital Signal Processing	2018- 19- sem1

Company Experience Year

The work involved web development and iOS development including both frontend and backend, involved technologies such as Angular, Node.JS, MongoDB, Swift, OpenCV work involved experimenting with lot of technologies. Tool used (Development tools - H/w, S/w): CreateML, Postman, Xcode Objectives of the project: The Objective of the project was to create a dashboard for tracking the status of various test cases for different labs across India and some other projects involved preparing prototypes for some iOS apps Major Learning Outcomes: Software development life cycle, team work Details of Papers/patents: Brief Description of working environment, expectations from the company: The work hours are flexible given that you complete the tasks, team is small and bonds well and everyone is ready to help, PPO depends on the openings and the team you are allotted Academic courses relevant to the project: Data Structures and Algorithms, DBMS, OOPS, Machine Learning Mentor Mentor comments: Akhilesh is assigned to develop/debug the power management features for ARM's RD-E1-Edge reference platform which incorporates "Neoverse E1 CPU". ARM not only provides the processor architecture but also provides reference software. "The Arm Neoverse E1 CPU delivers best-in-class throughput efficiency. It incorporates a new simultaneous multithreading (SMT) microarchitecture design. With SMT, the processor can execute two threads concurrently resulting in better aggregate throughput performance" Akhilesh was initially guided to understand the ARM RD-E1 architecture and design specifications. Akhilesh excelled at this and he was able to understand those specifications. He is now onto developing/debugging the power management features. He is quick learner, good team player and committed to work. We are very happy with his progress in the work. Mentor comments: Strengths Very quick learner – Within a very short period of time he has understood our flow and is confidently able to make changes and test without any problems. Meticulous and diligent – has a very good idea of what he is doing and what the end result should look like. He takes the pain to question and understand the task. Tries to solve problems independently – He does ask for help when he is really stuck but mostly I have seen that he tries to solve all issues by himself. Even though he is very new to our flow, he is able to debug and solve issues. Areas of improvement None found. He should just continue doing what he is doing right now. Mentor comments: In the short time that I have worked with Rohit, he seems to be a smart, hard-working person who can quickly pick up on things. Being very new to not just ARM, but to the whole industry, he ramped up very well and

did not need a lot of spoon-feeding. With little details given on his tasks, he puts in a lot of effort to understand things on his own and carry them out independently as far as possible. He has successfully added support for Arch32 External Debugger to ARM A-Class CPU Directed Verification infrastructure. Currently he is working on a script that will be extracting the ARM System Registers R/W value from Machine Readable Specifications. Till now, I would say he is doing a great job! Brief write-up on PS-II station: The students are working in the area of verification/Validation, Reducing Cycle Time for Build Quality Feedback through Enhancement in Hardware & Software Infrastructure, Testing and implementation of Advance extensible Interface Weighted Random memory Delay Module, Designing a wrapper component for CPUs, Providing Power support and managment capability from the firmware level to kernel level for latest hyperthreaded CPU Architectures designs of ARM etc. The students were given training on Labview in National Instruments. Students worked on various tools and languages like C, python, Linux/UNIX, verilog, computer architecture, shell scripting. Awareness of scripting languages, programming concepts and computer Architecture are themareas the organisation is looking at for the various projects. Student

Apple India Pvt Limited , Hyderabad 2019-20sem1

I worked in the DevOps team which is a part of the Ad Platforms Group of Apple. I was initially asked about the technology I was interested to work on. So, I was given the machine learning part of a bigger project my whole Ops team was involved in. I had to use machine learning to help identify anomalies in business critical metrics in real-time which takes a lot of time manually. By identifying these anomalies quickly we can check for issues and take proactive measures and prevent huge revenue losses. Tool used (Development tools - H/w, S/w): Internal tools for Machine Learning, pytorch, AWS s3, flask, internal deployment tools Objectives of the project: Predict anomalies in business critical metrics to identify issues and reduce revenue losses Major Learning Outcomes: I had so much time that I got to learn about a wide range of technologies and could spend reasonable time learning each one that I worked on. A major part was about machine learning and deep learning. I learned about pytorch framework for deep learning and used it to write Multi-layered Perceptrons and LSTM models. I learned about optimising the use of storage and computation resources and also about the deployment workflow. Learned flask and other related technolgies to develop machine learning API. Brief Description of working environment, expectations from the company: The working environment was great. My mentor and manager particularly were very helpful and had trust in what I was doing. The expectation was to make me learn rather than just finish things off or achieve any target. There was no pressure of deadlines which gave me time to explore and read about

things in detail. Academic courses relevant to the project: Machine Learning, DBMS Limited, Bangalore

APPLE INDIA PVT. LTD.

2018-19sem1

Company	Experience	Year
ARM Embedded Technologies Private	I was tasked with optimizing a sqlite database based python script that took two databases and compared the corresponding table data based on a number of command line arguments. This script, run on a weekly basis, took approximately 12 hours on a single run. Using the pandas library I introduced optimizations in the comparison functionality to bring it down to under 2 hours of running time. I was also asked to develop a partner tool that encrypted sensitive data files before uploading them to specific drop zones and send appropriate notifications. Parallel to these main tasks, I also wrote several unit tests for many scripts in Python and Perl. Tool used (Development tools - H/w, S/w): Python, Perl, Linux environment, Git Objectives of the project: Optimizing partner tool Major Learning Outcomes: Learnt a fair bit about producing production quality code and understood the basics of a version control system, git Details of Papers/patents: None Brief Description of working environment, expectations from the company: The company environment is excellent. Everyone, fellow team members or not, was willing to give a helping hand whenever required. Working hours are flexible and there is no undue stress or pressure. Team outings are also pretty frequent and enjoyable. Academic courses relevant to the project: Object Oriented Programming Name: Pratyush Srivastava (2015A3PS0346H)	2018- 19- sem1
ARM Embedded Technologies Private	The work was basically related to computer architecture completely on the ARM architecture and was based on indigenous tool being developed by ARM. Tool used (Development tools - H/w, S/w): BASH, Perl Objectives of the project: ArchEx Major Learning Outcomes: BASH, Vim, ARM Architecture Academic courses relevant to the project: Computer Architecture Name: Somjit Banerjee (2015AAPS0184H)	2018- 19- sem1
ARM Embedded Technologies Private	Running benchmarks on the different generations of cpu that ARM has and compiling the results.  Calculating the theoretical expectations by understanding the micro architecture involved and the source code. Comparing the results with the theoretical expectations and also see the generational trends.  Analyze all the results and explain the trends on the basis of pmu events, architecture and source code.  Tool used (Development tools - H/w, S/w): Linux Shell scripting, (Perl,Python,C,C++)Programming  Languages, Development Boards, Cadence Emulator Z1 Objectives of the project: Micro-architecture profiling through benchmark analysis Major Learning Outcomes: Computer Architecture, Scripting, Linux environment, Performance measurement Academic courses relevant to the project: Computer Architecture Name: Harshit Arora (2015A3PS0184P)	2018- 19- sem1
ARM Embedded Technologies Private	In physical design, because of ruthless competition, it is necessary that you have the best of design and technology to stay ahead of your competitors. However, these alone are not enough if you don't know how to use the technology optimally i.e. which tools give the best performance with your design optimization. This is the aim of this project, to infer which eda tools result in the best PPA (Power Performance Area) for a technology. We consider the various tools from the two stalwarts of the eda tool industry, Cadence and Synopsys, to see which combination gives us the best possible PPA. Tool used (Development tools - H/w, S/w): CADENCE AND SYNOPSYS EDA TOOLS Objectives of the project: OPTIMIZATION OF PPA ON MIXED-FLOWS ACROSS CADENCE & SYNOPSYS DIGITAL IMPLEMENTATION TOOLS Major Learning Outcomes: Knowledge of physical design, hands-on experience on the EDA tools used in the industry and experience of working in an organization. Brief Description of working environment, expectations from the company: The environment is very friendly and chilled out. The company wants you to have a comfortable environment which promotes you to enjoy your work. There are deadlines but not unrealistic ones and if you work properly along with your team, these are pretty easy to achieve. Academic courses relevant to the project: Basics of Digital Design, ADVD, Computer Architecture Name: Ishan Gupta (2015A3PS0192P)	2018- 19- sem1

Company	Experience	Year
ARM Embedded Technologies Private	The work was divided into two phases. The first phase involved generation and validation of views used for industry standard EDA tools. The setup for Arm internal software used for these views was generated. Second phase was based on designing general purpose Input/Output cells (GPIOs) for low power applications which involved tuning certain types of cells to get the desired performance and experimenting various architectures in order to develop the one with least leakage. Tool used (Development tools - H/w, S/w): Builder Tool(ARM Internal Tool) Cadence Virtuoso (For generating schematics and netlists) Cadence Viva (For analyzing the wave forms) Spectre/Hspice (For simulations) Objectives of the project: The first project was aimed at generating setup for builder tool used to generate and validate industry standard views for I/O libraries. Second Project was aimed at development of low power i/o cells. Major Learning Outcomes: Linux (OS) Cadence Virtuoso (For generating schematics and netlists) Cadence Viva (For analyzing the wave forms) Spectre/Hspice (For simulations) Interfacing done by I/O cells in an SoC Brief Description of working environment, expectations from the company: The working environment is very motivating. Learning and fun goes hand in hand. The employees are very enthusiastic and are always ready to help you out. They not only teach you but are ready to learn from you too. Don't expect a lot if getting PPO is the prime concern because that is variable and depends upon the company policies. But if learning is the motivation, then the internship process here is awesome. They provide you rights to work on live projects with the whole team, making you go through the actual work one does over here as a full time employee, thus giving the insights of the true story. Academic courses relevant to the project: ADVD, Computer Architecture, Very basics of ED, Basic knowledge of Linux & xml. Name: Rajuldev Sumeeth (2015A3PS0297H)	2018- 19- sem1
ARM Embedded Technologies Private	The main aim of the work SelfCharacterization Micros was to create a set of tests that can be run on Arm architecture devices to get some visibility into underlying microarchitecture. Primarily the focus was on high-level performance parameters like machine width, execution cluster latency and throughput, cache hierarchy, etc. Tool used (Development tools - H/w, S/w): Unix environment, Multiple mobile devices for testing. Objectives of the project: To get some visibility into underlying architecture of ARM based architecture processors. Major Learning Outcomes: microarchitecture of processors Brief Description of working environment, expectations from the company: The working environment is good enough to stay motivated to hit the office on every working day. The support given by the mentor/manager is quite appreciable. We get to learn a lot of things beside the technical knowledge we gain. Academic courses relevant to the project: Computer Architecture, C programming. Name: Digvijay Bansal (2015A3PS0187P)	2018- 19- sem1
ARM Embedded Technologies Private	I worked on designing a custom software solution for Memory Compiler Evaluation from scratch and to provide feedback on performance metrics for various memory compilers, the work majorly consisted data analysis and scripting. Later, the project got extended to develop solutions for comparative Power, Performance and Area analysis over various set of compilers. I did work on Web-Development also as a side project. Overall it was a good learning experience. Tool used (Development tools - H/w, S/w): Python, Shell Scripting, Tcl Objectives of the project: To automate the Memory Compiler Evaluation process, and make a flow to ease process of benchmarking with minimum user interaction. And to present the collected data in form of spreadsheets and visual plots. Major Learning Outcomes: Learnt the Memory Design Flow. Understood the effect and implementation of various features on Memory Compilers and how they effect the performance metrics. Also got acquainted with the process to handle the complete software development cycle. I understood the corporate culture and the expectations from a fresher engineer in the industry. Brief Description of working environment, expectations from the company: The office vibe is calm and work was carried out quite smoothly. All the employees are friendly & approachable to get doubts cleared. I was given enough time to learn and deliver the task assigned. The work culture is not hectic and comparatively manageable. Finally, ARM is a great place to work and my expectations from the company were mostly met positively. Academic courses relevant to the project: Analog and Digital VLSI Design Name: Prachi Sharma (2015A3PS0278P)	2018- 19- sem1

Company	Experience	Year
ARM Embedded Technologies Private	I was part of multiple projects in which I have developed standard cell libraries using Cadence and Synopsys EDA tools. It involved linux scripting, circuit and layout design and characterizing them to simulate them for real time conditions. Tool used (Development tools - H/w, S/w): Cadence Virtuoso, Synopsys back end Objectives of the project: The main objective of this project is to generate the model views as per industry standards and perform quality assurance for the same using indigenous tools and third-party tool caterers. Standard Cell team designs libraries consisting of thousands of cells based upon the requirements of the customer. The PDK is created by the foundry defining a certain technology variation for their processes. It is then passed to their customers to use in the design process. The customers may enhance the PDK, tailoring it to their specific design styles and markets. The standard cells are characterized with the given PDK files using the characterization tools. The fundamentals of standard cells for which these libraries are developed are dealt in the project. The methodology used for the characterization and the effects that play a part are also explained. Major Learning Outcomes: Circuit Design, STA, backend ASIC flow Brief Description of working environment, expectations from the company: The Standard Cell team is the one to intern with as I have learnt more digital design work than many of my friends in other PS2 stations. The colleagues are so patient with you and you are included in the team's live projects with real customers. Industrially applied ADVD is what you can learn here if you have the passion to ask for creation work and do it as per deadlines. I would highly recommend my team for joining as PS2. Academic courses relevant to the project: ADVD, computer architecture, Microelectronics, circuit design Name: Vibhor Govil (2015AAPS0258H)	2018- 19- sem1
ARM Embedded Technologies Private	Created a Java Utility to analyse large sets of data containing run-time statistics of different cell views of a product and generate three types of reports and xml file based on the data analysed. Successfully automated the complete process of migrating a project from subversion (svn) to git with all its history and tags. Tool used (Development tools - H/w, S/w): Software - Intellij IDEA, Unix, Git, Subversion Objectives of the project: A Java application that analysis run-time statistics like CPU time, Memory Footprint of different cell views of an IP and generates output reports based on the data analyzed. And how to migrate a project from Subversion (svn) to Gerrit (git) with all its history (previous revisions) and the source codes and automate the process using shell scripting. Major Learning Outcomes: Learned about the use of Java from industry perspective and how best to implement it. Also learned shell scripting and the UNIX environment and various technologies used in the industries such as Load Sharing Facilities, Module Systems and Version Control Systems. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms	2018- 19- sem1
ARM Embedded Technologies Private Limited , Bangalore	As a part of the Open source software group which is developing firmware for infrastructure designs in ARM, I had to work on Debugging the powering off of a multithreaded processor. i also had to develop a framework for message transfer for different entities in an SOC. Tool used (Development tools - H/w, S/w): C, ARM based Simulators, Gerrit Objectives of the project: To turn of the cores with control and message passing between cores Major Learning Outcomes: Firmware design Details of Papers/patents: na Brief Description of working environment, expectations from the company: The OSS group in ARM is a very friendly, motivated and flexible team with wide range of domains and to work on. The company expects you to be able to deliver the project by the release date and to be proactive in respect to the work you are undertaking. good communication is one of the main requirements for this team as its highly collaborative and technical. Academic courses relevant to the project: computer architecture, microprocessor interfacing. Brief write-up on PS-II station: ASA Noida engage in manufacturing parts for electrical application. They students were equipped with the tools as per the industry demands. More experience on simulation tools would be an added benefit. Student	2019- 20- sem1
ARM Noida	Our work was related to designing SRAM based memories to build Register Files and Register Arrays. I was assigned different activities which assisted other teams to work on the deliverable properly like benchmarking simulators, bitcell analysis, memory instance testing, etc. Tool used (Development tools - H/w, S/w): Cadence Spectre, CustomSim XA, Shell scripting, Python, Virtuoso Objectives of the project: To assist the teams in benchmarking and shifting from Spectre to CustomSim working on technology nodes like 22nm, 18nm etc. Bitcell analysis, memory instance testing, analysis and testing of various parts of an instance. Major Learning Outcomes: Digital VLSI design for SRAM based memories, CMOS basics, Timing, etc. Academic courses relevant to the project: Analog and Digital VLSI Design, Digital Design, Microelectronic Circuits, Electronic Devices	2018- 19- sem1

Company	Experience	Year
ARM, Bangalore	The purpose of system validation is to provide a high degree of assurance that a particular system will perform consistently to fulfill the requirements for an intended application, meeting its predetermined specifications. The system validation suite provides functional and real world use case scenarios to test ARM IPs in a real world system environment during pre-silicon phases of the IPs. Hence it is important to ensure all tests provide functional correctness to validate an IP being validated in a system environment. The validation test suite contains IP specific scenarios and tests to run on top of the real world Linux operating system. The main aim of my project is to validate the GICv3 using test application codes written in C. This includes writing test cases to validate GICv3 and debugging existing ones. Objectives of the project: The main aim of my project is to validate the GICv3 using test application codes written in C. This includes writing test cases to validate GICv3 and debugging existing ones. Outcomes of the project: For the test cases of ARM GICv3, I could successfully run the test cases. The successful output log for simple Linux based test contains the details of boot loader initializing various aspects to help Linux start operating system. Major Learning Outcomes: 1) C programming language. 2) Computer architecture and Operating system concepts. 3) ARM architecture Brief Description of working environment, expectations from the company: The working environment is good. Working hours can be shifted according to convenience.	2016 17- sem1
ARM, Bangalore	My project requires architectural knowledge of ARM memory architecture. So I have gone through various sections of ARM architecture reference manual. I ran regression of suites with new page table tool and debugged the issues with failing test cases. I qualified the new tool on various suites following a specified methodology by my manager and the new tool is successfully deployed to partners. Objectives of the project: To ensure the successful deployment of architecture validation suites with new page table tool. Outcomes of the project: Successfully ported various architecture validation suites. Major Learning Outcomes: ARM memory architecture, PERL scripting Brief Description of working environment, expectations from the company: The people are friendly here. They are very helpful and one can easily approach them if they face any problem.	2016 17- sem1
ARM, Bangalore	I worked on a tool based process which helped in IP validation. Once the IP is created, it needs to be verified for its characteristic numbers. This tool helped in such sort of characterization of the process design kits released by various foundries. The obtained results as a whole help in understanding the usual trend in design variations made by different foundries and the competition between their products. This tool is used for a rough estimate at different stages of a product release project. It was a great learning experience to get a hands-on feel of what goes on in the industry. Tools used (Development tools - H/w, S/w):ARM internal EDA tools, UNIX,H-spice decks, Shell Scripting Objectives of the project: To compare different process design kits released by foundries and get their characteristic numbers. Outcomes of the project: Successfully gave a clear comparison between different Process Design Kits. Major Learning Outcomes: I learned the Standard cells aspect of Physical Design of IP(Intellectual Property). Brief Description of working environment, expectations from the company: ARM has a brilliant work culture. Every employee is very dedicated and approachable; hence the whole experience is smooth.	2016 17- sem1
ARM, Bangalore	My work was to consolidate configurations files which are effects for test recognition and test behavior purposes. This includes duplicate configuration files (contents may be same or different), using only a single file instead of multiple files. Tools used (Development tools - H/w, S/w):PERL, Python, Vim Objectives of the project: To consolidate the ArchitectureValidationSuite configuration files. Outcomes of the project: Stabilizes the ArchitectureValidation Suite and helps in the automation of test case generation. Major Learning Outcomes: PERL, ARM architecture Brief Description of working environment, expectations from the company: ARM provided a good working environment for the interns. Managers and mentors are available to clarify any doubts if you are stuck at a point in your project.	2016 17- sem1
ARM, Bangalore	ARM has two versions of validation to validate the architecture. These two versions of VAL further has two memory mapping configuration files. The objective was to merge both of these files into one to give a unified representation of memory mapping and reflect the changes in VALIDATION scripts in order to make this work for both of the versions of validation. Tools used (Development tools - H/w, S/w):Notepad++, Gvim Objectives of the project: To merge memory mapping representation of ARM v7VAL & v8VAL. Outcomes of the project: Succeeded in completing the project. Major Learning Outcomes: Unix Shell, PERL Brief Description of working environment, expectations from the company: Mentors were really helpful. The work-life balance of company can be considered best in industry. Working environment is friendly.	2016 17- sem1

Company	Experience	Year
ARM, Bangalore	My work was based on standard cells. I had to use Verilog, and TCL for scripting. Tools used (Development tools - H/w, S/w):Verilog, TCL, Perl Objectives of the project: Automating the creation of a single unified Verilog simulation model from 6 different Verilog models. Outcomes of the project: Reduced maintenance associated with having 6 different models. Major Learning Outcomes: Studied modeling of standard cells, types of verifications performed, along with toold used for the same. Brief Description of working environment, expectations from the company: ARM has a very good work environment. People are warm and welcoming and willing to teach you. Expectations may depend on your manager but they are usually in line with what you have studied in college.	2016- 17- sem1
ARM, Bangalore	During my internship, I have done three different projects. The first project title was Optimizing the performance of Coverage model with C/C++ using DPI. Thus, by getting the program flow from SV, we are parsing and fetching lines using C and sending off the signals to the SV using enum which ensures that SV has to only deal with numerical values. The second project title was "Performance Analysis for Various Models". As the title suggests, the aim is to find the performance analysis of the given tarmac logs on the current model. The third project was to involve in development of new tool. My work was to implement the new requested features and find the bugs and fix them. Tools used (Development tools - H/w, S/w):Questasim by Mentor Graphics, Python compiler, C compiler, C++ compiler, GVIM Objectives of the project: Optimizing the performance of Coverage model with C/C++ using DPI. Outcomes of the project: The time to run the set of logs decreased thereby making the coverage productisation faster. Major Learning Outcomes: Better understanding of Architecture and Linux commands and scripts. Better programming skills. Brief Description of working environment, expectations from the company: The working environment was good as there was no pressure from the management and team to finish the work in the given deadline. Everyone was ready to help you at any time, even if you didn't know him/her.	2016- 17- sem1
ARM, Bangalore	Built a debugging tool which extracts transaction that are interacted in a testbench. Tools used (Development tools - H/w, S/w):System Verilog-s/w, Universal verification methodologys/w, Questa sims/w, JAVA-s/w. Objectives of the project: The intent of this project was to develop a Transaction Debugger for the ease of debugging the various test cases and test benches. Outcomes of the project: The tool was built and was functioning but had some glitches which could not be solved in the given time. Major Learning Outcomes: System Verilog and Universal Verification Methodology. Brief Description of working environment, expectations from the company: It was a very good learning environment. The employees were very helpful and innovative. They were very knowledgeable and never hesitated to teach. The infrastructure is very open and welcoming like the people in the company.	2016- 17- sem1
ARM, Bangalore	I built an automatic test generator for memory consistency. Objectives of the project: Automatic test generator for memory consistency. Outcomes of the project: An automatic test generator for memory consistency is built with limitations on number of agents and cache-line variations. Major Learning Outcomes: I got a great insight in coding with python and the sequence language which was specific to project. Brief Description of working environment, expectations from the company: The working environment is great and people around here are friendly and approachable.	2016- 17- sem1
ARM, Bangalore	I was involved in the design and development of SRAM memory compilers for the Physical Design Group. Tools used (Development tools - H/w, S/w):Cadence Virtuoso, Pegasus, MDBScaler (Internal ARM tools). Objectives of the project: Successful Design of a RAM compiler where the IP can be sent to a customer for varied uses. Outcomes of the project: We managed to successfully release multiple compilers according to the needs of the customer. Major Learning Outcomes: Shell Scripting skills were improved. I also learnt a lot about memory architecture. Brief Description of working environment, expectations from the company: The working environment is very good. People are friendly and always ready to help. This was a great learning experience.	2016- 17- sem1
ARM, Bangalore	I have worked on IP validation methodologies which help in making sure that the design is error free. My project was focused on creating necessary configuration files for QA-Builder (Quality Assurance). Along with the main project work, I worked on TCL also. Tools used (Development tools - H/w, S/w):QA-Builder, Cell-Builder Objectives of the project: To create EDA source packages to validate the IP views Outcomes of the project: 3 EDA source packages named EDA16p1, EDA9p1 and EDA9p0 Major Learning Outcomes: I learned how the design validation flow works. I developed competencies in TCL. Brief Description of working environment, expectations from the company: The work environment is very good at ARM. My mentor helped me a lot in the learning process.	2016- 17- sem1

Company	Experience	Year
ARM, Bangalore	Tool Development. Tool is used for Coverage Analysis of a SOC. Tools used (Development tools - H/w, S/w):Perl, TCL,R,Verilog Objectives of the project: To check the effectiveness of verification process carried out on SOC. Outcomes of the project: Using the Developed Tool, coverage Data is generated and analyzed to understand the stimuli used for testing Major Learning Outcomes: Verification process(mainly Coverage), scripting languages Details of papers/patents:CATSCAN- ARM Publication (internal purpose) Brief Description of working environment, expectations from the company: Work wise it is good place, a lot can be learnt with some effort. The team is helpful and friendly, and expects the interns to complete the tasks on time and explore a lot not by limiting themselves to a specific project.	2016- 17- sem1
ARM, Bangalore	The work involved in my team was to assemble an octa-core processor for different configuration using standard cells, memories and other instances. I also worked on designing cores. On the sideline, I learnt about scripting in TCL. Tools used (Development tools - H/w, S/w):Cadence tools: Genus, Innovus, Tempus, Conformal. ANSYSRedhawk Objectives of the project: To design an octa-core processor with different configurations at different technology nodes Outcomes of the project: The outcome of the project was to design various octa-core processors for various mobile markets. Major Learning Outcomes: Placement & Routing, ASIC flow, Physical design, Floor-planning, Crosstalk analysis Brief Description of working environment, expectations from the company: ARM is a great company for interns and especially for those who want to have an insight about the semiconductor company. People in my team were very approachable and helped me with the smallest of details. The working environment is quite positive and they focus especially on smart work.	2016- 17- sem1
ARM, Bangalore	The work involved in my team was to assemble an octa-core processor for different configuration using standard cells, memories and other instances. I also worked on designing cores. On the sideline, I learnt about scripting in TCL. Tools used (Development tools - H/w, S/w):Cadence tools: Genus, Innovus, Tempus, Conformal. ANSYSRedhawk Objectives of the project: To design an octa-core processor with different configurations at different technology nodes. Outcomes of the project: The outcome of the project was to design various octa-core processors for various mobile markets. Major Learning Outcomes: Placement & Routing, ASIC flow, Physical design, floorplanning, Crosstalk analysis Brief Description of working environment, expectations from the company: ARM is a great company for interns and especially for those who want to have an insight about the semiconductor company. People in my team were very approachable and helped me with the smallest of details. The working environment is quite positive and they focus especially on smart work. Student	2016- 17- sem1
ASA Industries , Noida	I identified various waste in the various manufacturing processes at the company. I recommended installation of hydraulic clamps which will enable to successfully implement SMED. I I was instrumental in procurement of various high end machines for the company such as laser marking machine and bomb calorimeter. Which will help in tracking of the products and determine the best wooden pellets respectively. I also designed gauge design which will help the company in qualifying the product Tool used (Development tools - H/w, S/w): Large machine, AutoCAD, Solidworks, MS excel, Ms office Objectives of the project: To improve efficiency of manufacturing processes, tracking of the company products. Major Learning Outcomes: Brief Description of working environment, expectations from the company: Academic courses relevant to the project management, sustainable manufacturing: Lean manufacturing, Manufacturing Student	2019- 20- sem1

Company	Experience	Year
Aurigo Software Technologies , Bangalore	I was part of one of the teams that directly work on the company's flagship product "Aurigo MasterWorks" and work was related to both bug fixes on priority and new feature implementations on the product. Every developer is assigned work that has equal parts of Front-end, Back-end, and business Logic. The work was based on Client Asks/Requirements and the company follows AGILE development model, so efficiency was focused upon. Great introduction to an actual IT work life where "How" to write good code is emphasized and valued! Tool used (Development tools - H/w, S/w): Visual Studio, MicroSoft SQL Server, Sequel Server Reporting Services. Objectives of the project: Contribute to the development of AurigoMasterworks as part of the team student has been assigned to, and deliver a plethora of feature implementations and Bug fixes. Major Learning Outcomes: Learning technologies and practices for becoming a competent full stack Developer Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is extremely positive and active. The company is scaling big and is actively pursuing (and on track to reach) its roadmap targets for the future. AGILE model of development has been adopted pushing for quick responses to client asks for bug/ feature implementations. The company understands that a new developer will take time to make way around the code base and actively encourages discussions regarding any doubts. The main expectation Aurigo is looking for is the student to be proactive in discussions and day to day work. Academic courses relevant to the project: Object Oriented Programming. Data Base Management Systems, Brief write-up on PS-II station: Essential prerequisite courses required before working on the project OOP, DBMS, Data Structures, Web development, operating systems, Deep Learning Specialization, NNFL, Machine Learning Ruby on Rails, React, PostgreSQL, react JS, Elixir, Python, Google Cloud Platform, Google Datastore API, Pytorch/Tensorflow, Golang, OO	2019- 20- sem1
AutoRABIT, Hyderabad	Integration of business intelligence tool for reporting and analytics. Crating a reporting tool for the clients as well as the organisation Tools used (Development tools - H/w, S/w): Java, Birt, HTML, jQuery, d3js.  Objectives of the project: Outcomes of the project: To create a module for reporting Outcomes of the project: A module was created through which all the necessary reports are generated Major Learning Outcomes: Dsa, Oop, front end and back end develoment Brief Description of working environment, expectations from the company: As the company is a startup the work environment is very active where every one is involved in everything in one way or the other. As we would be getting hands on everything the learning curve at this company is huge. Academic courses relevant to the project: Dsa, Oops	2017- 18- sem1
AutoRABIT, Hyderabad	We were asked to introduce Business Intelligence into our company by preparing usage reports and dashboards Tools used (Development tools - H/w, S/w): D3.js and BIRT Objectives of the project: Outcomes of the project: Introduction of Business Intelligence in AutoRABIT Outcomes of the project: Preparing interactive dashboards Major Learning Outcomes: Data Visualization using D3.js Brief Description of working environment, expectations from the company: Since the company is a startup founded in Hyderabad, you might face a language barrier. The work environment is decent Academic courses relevant to the project: Dsa, Oops	2017- 18- sem1
AutoRABIT, Hyderabad	I worked on a web app as a full stack developer, taking care of the front end as well as the back end using SOAP web services. Tools used (Development tools - H/w, S/w): Eclipse, JAVA, jQuery Objectives of the project: Outcomes of the project: Ottomes of the project: Optimisation Major Learning Outcomes: Software and Code Management, Optimisation in Code Brief Description of working environment, expectations from the company: The company was very lenient towards timings. We had to manage our work before the deadline and keep reporting daily to our managers. Academic courses relevant to the project: Object Oriented Programming Student	2017- 18- sem1
Avaya India Private Limited , Pune	I worked with the SBCE TEAM.Implemented a chatmessenger to their working environment and worked with file-handling, file conversion with the help of Python. Tools used (Development tools - H/w, S/w): Putty,Winscp,VMware,Linux,Python,C++ and machine learning and socket programming Objectives of the project: To ease the work process for the employee and to filter the problems in a call transaction using collaborative filtering. Outcomes of the project: Besides learning and working with team knowledge,I felt the joy of working in the projects which would be great use. Major Learning Outcomes: socket programming and multithreading Brief Description of working environment, expectations from the company: The environment is cool.It's all upon you what do you want to learn and work upon.You will get an opportunity to work with good and friendly people.	2016- 17- sem1

Company	Experience	Year
Avaya India Private Limited , Pune	1. Development of a basic login form. 2. Enhancement of an existing web application. 3. Study and use of many programming languages, applications and concepts. 4. SAX Parsing of an XML file using Java. Tools used (Development tools - H/w, S/w): Software Tools: Eclipse, Avaya Aura SMGR, Apache Tomcat Server. Objectives of the project: The main objective of the project was to parse an XML file and compare the information contained in it on two consecutive days to see if there is a new version of software available. Another objective achieved before submission of the Midsem report was to develop a basic login form as well as enhance an existing web application and link it to the PLDS (Product Licensing and Distribution System). Outcomes of the project: An XML file was parsed using SAX parser by writing a Java program to output the required data in the format. Major Learning Outcomes: 1. Web Development - HTML5, CSS3, JavaScript 2. Programming - Java 3. Databases - MySQL 4. Concepts - OOP, Core and Advanced Java, Basic Computer Networks, HTTPS, Web Services; SAX, DOM and JAXB Parsing. Brief Description of working environment, expectations from the company: The working environment was very supportive at Avaya and the employees and my mentors were very helpful towards my project completion. It was a great learning experience and gave a much needed exposure to the working of a company and the industry requirements. The company expected the student to know, learn and be able to apply many concepts and use several tools apart from those used in college.	2016- 17- sem1
Avaya India Private Limited , Pune	I mainly worked on software testing. I had to automate ocena workspaces a contact center application using a pure java based application called jmeter. Tools used (Development tools - H/w, S/w): Jmeter, java Objectives of the project: Automating multiple number of agents at the same time. Outcomes of the project: Able to automate most of the contact center part except a few things like "co browse". Major Learning Outcomes: Got some experience working with java and learned about the dynamic working of web sessions. Brief Description of working environment, expectations from the company: The team that I was assigned to is pretty supportive and guided me through the project; especially my mentor. Company expected me to do complete the project but a little part of it remained.	2016- 17- sem1
Avaya India Private Limited , Pune	The project was based on Performance Testing of Co-Browse which is a part of Avayaa's project OceanaTM 3.2. Co-browsing is a software enabled technique helping a customer by connecting it to an agent. Avaya Co-Browsing Snap-in provides a set of consolidated services for sharing a webpage session. Using Avaya Co-Browsing Snap-in, two users can browse the same webpages simultaneously to collaborate and accomplish certain tasks. The agent can assist the customer to navigate through the webpages and, if required, in filling out forms.My task was to write the automation scripts which can be used for performance testing of this application. Later the same thing was implemented using TestNG. Tools used (Development tools - H/w, S/w): Selenium-IDE,WebDriver,Grid. TestNG(A testing framework) PhantomJS(A headless browser with JS API) Objectives of the project: The main Objective of this project was to reduce the memory leak during performance testing.Earlier,for each Co-browse session,the memory consumed was around 900MB.So,the main goal was to reduce this memory consumption. Outcomes of the project: The following points were achieved from this project: [] [] [] [] [] Scripts written in Java , Easier to modify Easier to start & stop the sessions Customer initiated Co-browse Detailed generation of logs Customer & agent can be on different machines(Using Selenium-Grid) Each agent & Customer has a unique username(Easy to map on admin page) Start time & stop time of each session, also the total time taken by all the sessions is mentioned. Use of TestNG:Helped in reducing the number of exceptions. Also detailed report generation can be obtained easily. Also, the memory consumption per session was reduced from 900mb to 300mb per session. Major Learning Outcomes: Learnt Core Java, Selenium WebDriver, Selenium-Grid & TestNG. Brief Description of working environment, expectations from the company: Lots of new things to learn, excellent work culture and management. Avaya provides ample opportunities.	2016- 17- sem1
Avaya India Private Limited , Pune	Created a hand gesture recognition system for the Avaya CSDK. Tools used (Development tools - H/w, S/w): Visual Studio Objectives of the project: Creation and integration of a custom library into the csdk Major Learning Outcomes: Software development and testing Brief Description of working environment, expectations from the company: The working environment is good, and so are the facilities. Do not put any expectations from this company, the work is completely related to software development, and there's little chance for a PPO. Even if you work hard you can't expect any job offers here.	2016- 17- sem1

Company	Experience	Year
Avaya India Private Limited , Pune	Web Development of various new products in Avaya. Tools used (Development tools - H/w, S/w): Linux server, Putty, WinScp, Tight VNC viewer. Objectives of the project: The computation and analysis of persons' data based on his skills is an open problem. It is time consuming. This problem can be solved using Skillsmap. Main objective of this project is to provide information regarding a person's skills working on the roles and products, his previous records, his contribution in the previous work in the respective project. It helps the user to collect information very efficiently and in less time. Skillsmap help manager to get the skills information of his employees. Outcomes of the project: This tool is being used by the everyone in Avaya, especially managers as it helps them to visualize the data easily. Major Learning Outcomes: Designing a Tool, Shell script to get anything from remote servers Brief Description of working environment, expectations from the company: Working environment is really refreshing and motivating. Everyone is helpful for whatever help you need. Timings are flexible.	2016- 17- sem1
Avaya India Private Limited , Pune	Worked on developing and improving an online performance monitoring tool. We used SSH to connect to remote machines from our machine and then use the tool to monitor and store performance stats of those machines for references. It was a web-development project, and so we used HTML, Php, JS, python and other concepts. Tools used (Development tools - H/w, S/w): HTML, Php, python, JavaScript, PuTTY, WinSCP, SSH, Apache Server Objectives of the project: To enhance and optimize the functionalities of the performance monitoring tool. Outcomes of the project: The performance monitoring tool now performs more efficiently than before. Major Learning Outcomes: Web concepts like HTML, JavaScript, php, python, SSH, cron Brief Description of working environment, expectations from the company: The working environment here is very lenient. We don't have any time constraints and are allowed to come and go at anytime we choose, as long as we do our assigned tasks and stay on the good side of the manager. The employees here are also very friendly and supportive. They make every possible attempt from their side to help us out any time. Apart from that there are regular team outings and so if you are a part of the team you can expect to get in about 3-4 outings with them, which is all fun. The company believes in the idea of us getting the maximum learning from whatever work we do. The first thing that my manager here told me was that he didn't mind if I didn't completed the project but as long as I made the maximum learning out of all my time over here.	2016- 17- sem1
Avaya India Private Limited , Pune	I created a dashboard to show the various metrics of an application running on the Google cloud platform. I had to show metrics like CPU utilization, Disk Utilization etc. in the form of a chart. I used the Stackdriver API to get the data and chart.js to show the data in the form of a chart. Tools used (Development tools - H/w, S/w): Javascript client Library, HTML, CSS, Bootstrap, HTTP Objectives of the project: To learn how to use the Stackdriver API for cloud monitoring. Outcomes of the project: Created a monitoring Application for the Google cloud platform. Major Learning Outcomes: I learnt how to make Authorized API and understood the process of OAuth2. I also learnt how to parse the JSON response received to show the data in some meaningful form. Brief Description of working environment, expectations from the company: The working environment here at Avaya was relaxed and you can work at your own pace. The mentors were quite helpful but they are usually busy and probably won't pay much attention to your project unless you are assigned a team.	2016- 17- sem1
Avaya India Private Limited , Pune	My project involved integrating a feature into one of the Avaya applications. The application - 'Contact Center' was initially capable of making audio calls. My task was to integrate video streaming within the call and make it a full fledged video call. I successfully integrated the video calling feature into the main application. Tools used (Development tools - H/w, S/w): JavaScript, AngularJS, HTML, CSS, WebRTC, Networking Protocol (SIP, SDP, etc.) Objectives of the project: To integrate video calling feature into the application Outcomes of the project: The application can successfully handle and stream video calls from other instances of the same application within or outside of the network Major Learning Outcomes: I majorly learned the fundamentals of web development (front-end & backend) and worked with the very recent and growing open source technology - WebRTC. I also got a detailed understanding of networking protocols in practical applications. Brief Description of working environment, expectations from the company: Avaya as a company provides a very helpful and conducive environment for its employees. The company does not count your weekly hours and 'strict timing' is not a part of Avaya culture, it is a very flexible company and is concerned about the quality of work produced by you and not the hours put in.	2016- 17- sem1

Company	Experience	Year
Avaya India Private Limited , Pune	During my entire stay here at Avaya, I had to develop new scripts using JMeter and performance test them. Initially around 15 scripts had to be created & tested. Once done, more new scripts were given to work on. Tools used (Development tools - H/w, S/w): JMeter Objectives of the project: Benchmark given to me was the average response times for the required key samples of my script had to be less than 5secs for each of the given tasks. Outcomes of the project: Test was executed and average response times obtained were actually more than 5secs in few cases for which issue had to be raised. Major Learning Outcomes: Performance Testing using JMeter Brief Description of working environment, expectations from the company: A mentor was allotted to me right from day 1 itself and she explained the work I had to do and the skills I needed. It was mostly on JMeter tool itself so I had to learn working with JMeter really quickly in order to start my work. Faculty NAME: PREETHI NG Comments: Expectations from industry: Azul builds Java runtime products and students are supposed to be well versed with OOP concepts and Java. They work on testing their products. Student	2016- 17- sem1
Avaya India Private Limited, Pune	Web-application development using Java, ReactJS and Redux. Starting from small Proofs-of-concept with little relevance, to working on development of major products. Tools used (Development tools - H/w, S/w): Eclipse, ReactJS, Redux, Maven, GIT, SVN, NodeJS Objectives of the project: Outcomes of the project: To develop some features of a web-application Outcomes of the project: Developed some features of the web-application Major Learning Outcomes: Learnt how to develop web-applications, along with proficiency in tools used such as Java, Javascript, ReactJS, Redux and GIT Brief Description of working environment, expectations from the company: Expectations from the company were low at the start, but as time went on, they started giving more and more work with actual relevance. Eventually, I was given the opportunity development of one of their flagship products. Environment is decent. There is a cheap cafeteria with decent food. However, I was given a mediocre desktop and not a laptop, resulting in some annoyances due to its poor performance and lack of flexibility. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms	2017- 18- sem1
Avaya India Private Limited, Pune	Implemented PBAP in Avaya Vantange (Android based desk phone) and Fixed numerous bugs and implemented some featuers in Avaya J129 phone. Objectives of the project: Outcomes of the project: Implementing new features and fixing bugs in Avaya phones. Outcomes of the project: Implemented new features and fixed numerous bugs in Avaya phone's software. Major Learning Outcomes: C++, JavaScript, HTML Brief Description of working environment, expectations from the company: Working Environment is very flexible(work timings, clothes), and the work given to me was quite easy. They haven't given any PPO yet, and don't usually give it, so keep that in mind. Academic courses relevant to the project: Object Oriented Programming.	2017- 18- sem1
Avaya India Private Limited, Pune	Creating EP&T Security Dashboard to monitor security threats in one complete view. Tools used (Development tools - H/w, S/w): Confluence,Excel, JavaScript, CSS, PHP, JQuery, Ajax, Chart.js,ASP.net and MS SQL. Objectives of the project: Outcomes of the project: To create a website Security Dashboard Outcomes of the project: Successfully created a running website on the test as well as production server. Major Learning Outcomes: Learned a lot about full stack development Brief Description of working environment, expectations from the company: Working environment was comfortable and nice. the people there were very helpful with everything and mentors guided us properly. Student	2017- 18- sem1
Azul Systems, Bangalore	The project falls in the Software testing division. I designed a JVMTI Test suite that helps add confidence to Azul's JVM, Zing. Automated tests and identified a few obscure bugs along the way. Tools used (Development tools - H/w, S/w): JNI, JVMTI, Basic Linux shell scripting Objectives of the project: To fill testing gaps in the JVMTI area. The project required me to come up with tests on the unexplored JVMTI APIs. The objective was to stress the JVM to ensure its robustness/identify flaws in its functioning. Outcomes of the project: Built a JVMTI test suite. Major Learning Outcomes: Java, C, JVMTI, JNI, Shell scripting basics. Understood work distribution and coordination between teams better. Brief Description of working environment, expectations from the company: Pretty pleasant working environment, with not much pressure. People are very avuncular and go out of their way to help. An opportunity to understand JVM internals. Faculty NAME: Chandra Shekar Rk Comments: Expectations from industry: Expectations from the industry - in terms of course requirements: Introductory knowledge of DBMSNoSQL DB, Testing-SW Testing as a part of SW Engg., Web technologies like Javascript, HTML, CSS. With hands on experience on the above mentioned tools, students should be able to cut down their preparation time for their projects. Student	2016- 17- sem1

Company	Experience	Year
Baldor Technologies Pvt Ltd	1. Digital Forensics - Using publicly available databases Build an API that will act as an ease for the agents to identify fraud in different fields. 2. OCR - Extract information from different ID cards using OCR and return the details of the person to our agents. Add more type of IDs to the existing API Tool used (Development tools - H/w, S/w): Python, Elixir, Phoenix framework, Go Lang, Ruby on Rails, React JS, etc Objectives of the project: Digital Forensics - Automate the verification process for various clients(Insurance companies, banks, etc) through APIs and software and reduce the decision making time for them, OCR - Automate the details extraction process for agents through softwares using OCR Major Learning Outcomes: Frontend and backend development, databases, web sockets, OCR techniques, web scraping Brief Description of working environment, expectations from the company: Great working environment Academic courses relevant to the project: DSA, OOP, DBMS Name: Madiha Manzoor (2015A3PS0008P)	2018- 19- sem1
Baldor Technologies Pvt Ltd	worked with Process Engineering team for first 3 months and Machine Learning team for 2 and half months. First project was based on analysis of processes and the second project included working with CNN model over image validation and classification. Tool used (Development tools - H/w, S/w): Python, Neural Networks, LINUX Objectives of the project: 1. Optimization and improvements of the existing processes.2. Image Validation using Machine Learning, CNN. Major Learning Outcomes: PYTHON, Neural Networks, LINUX Brief Description of working environment, expectations from the company: Cooperative work environment Academic courses relevant to the project: Machine learning, Neural Networks Faculty Name: Raja Vandhana P.	2018- 19- sem1
Baldor Technologies Pvt Ltd , Mumbai	I got to build an entire React app by myself. It was a dashboard for agents to conduct video KYC (Know Your Customer) for their customers. I also got to build some parts of the backend that would support the whole video KYC process. Tool used (Development tools - H/w, S/w): React JS, Elixir Objectives of the project: To build a Assisted Video KYC system Major Learning Outcomes: - Creating front apps from scratch - Using websockets for communication between server and client - Using Rabbit MQ for message queueing Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment is excellent. You aren't treated as an intern and are given responsibilities just like a full-time employee which means you get to work on live projects and your inputs are taken just as seriously. The tech team is very young. So, it's easy to communicate while making the working environment fun as well. There is absolutely no hierarchy. You can approach anyone for help, and he/she would immediately lend you a hand. It also helps in the continuous exchange of knowledge. In short, if you are looking for a place that gives you responsibilities and helps you learn a great deal, this is the right place for you. Academic courses relevant to the project: OOP	2019- 20- sem1
Baldor Technologies Pvt Ltd , Mumbai	Worked on developing and improving the backends of APIs for verification and information extraction from government-issued identification cards such as aadhaar, pan, voter, etc. I also developed a new API for document perspective correction. We were treated more like a regular employee rather than interns, so we didn't have had any particular projects, but received a part of work, the whole team was working on. Tool used (Development tools - H/w, S/w): Google Cloud Platform, Python, Ruby, Elixir Objectives of the project: Develop various API's for various business use cases. Major Learning Outcomes: Network and System Design, Image Processing, RestClient, Project development and management Details of Papers/patents: Brief Description of working environment, expectations from the company: The company has a startup culture and things move pretty fast here. So you'll get to experience and work on a lot of different things Academic courses relevant to the project: OOP, OS, Image Processing Mentor Mentor comments: Students are interactive and knowledgeable. They are proactive in solving the tasks on time. Brief write-up on PS-II station: All the three stations are software based organizations. The general expectations from stations are students should be from computer science background (Qubole) and if not, they should have done electives or acquired enough skill sets on Python, Java, Database, Spring, Hibernate etc Student	2019- 20- sem1
Bank of Hodlers	Develop the alpha stage of the product where a user can create/ delete his wallets and exchange currency between them. And create WordPress front-end for the office blog. Tool used (Development tools - H/w, S/w): JavaScript and WordPress frontend tools Objectives of the project: alpha stage of the Product Major Learning Outcomes: JavaScript, Node, Express Brief Description of working environment, expectations from the company: Very workaholic team. Supportive and motivating. Highly dedicated towards the goal of achieving a brand new format of banking structure. Would want to work longer. Academic courses relevant to the project: Computer Programming Development Centre Student Name: Arindam Kr Bhattacharjee	2018- 19- sem1

Company	Experience	Year
Beckman Coulter, Bangalore	Majority of the projects in the research and development department of Beckman Coulter, Bangalore are associated with flow cytometry. I mainly worked with panels used for immune function and immune monitoring research on flow cytometers. Tool used (Development tools - H/w, S/w): Flow Cytometer (NAVIOS, NAVIOS EX, CytoFLEX), Kaluza analysis, CytExpert, JMP, MS Excel Objectives of the project: To develop evaluation parameters of DuraClone panels on different types of flow cytometers Major Learning Outcomes: The major outcome of the project was that I acquired skills in the immunology and flow cytometry domain. These skills can be very helpful as many research organization in the US and Europe use flow cytometers for research in oncology, drug development and in-vitro diagnostics. Brief Description of working environment, expectations from the company: The working environment is excellent at Beckman Coulter. Interns undergo an extensive training program in which they are taught about operations of instruments such as centrifuges, HPLC, flow cytometers and about the various rules of the organization. The associates are willing to help the interns at any point of time. Academic courses relevant to the project: Molecular biology and immunology	2018- 19- sem1
Belief Systems	We focus on Business Process Reengineering. The objective of this project is to observe a distressed company from the outside. Through people and process transformation, we forecast cashflows, create necessary contingencies, optimize costs, and create financial dashboards reports. We assess the overall performance of a distressed company and its employees through various measures, and implement changes to turn around their processes and revenue. Tool used (Development tools - H/w, S/w): Power BI, MS Office Objectives of the project: Business Process Reengineering Major Learning Outcomes: Organizational Evaluation Academic courses relevant to the project: Finance Courses	2018- 19- sem1
Belong.co	My team was DevOps which deals with the infrastructure, deployment and relentless execution of the code/software developed within the organisation. As a part of this, it is a devOps engineer's duty to recognise the pain points and mend them so as to make the software efficient for use to the end user and robust at the same time. My project started with using the Alphabet tool Outline. Throughout the course of the internship I used Python, dealt with api calls and integrations. Tool used (Development tools - H/w, S/w): docker, ubuntu, pycharm Objectives of the project: To make deployments seamless Major Learning Outcomes: Knowledge about various devOps practices Academic courses relevant to the project: OOP, OS, CP, SCM, PPC, Math Faculty Name: Dr. Mahesh Hamirwasia Comments:	2018- 19- sem1
belong.co, Bangalore	Multiple projects. Created a dashboard to visualise data. Automated report making. Tools used (Development tools - H/w, S/w): Python, JavaScript, React.js, Flask Objectives of the project: Improve Efficiency of Customer Success team Outcomes of the project: Improved the efficiency of Customer Success team Major Learning Outcomes: The problem of Misconception is larger than any issue faced in development i.e, understand the problem properly before trying to solve it. Details of papers/patents: Project abstract was accepted for ILAFM-2016 Conference for oral presentation, and work for Journal is on progress. Brief Description of working environment, expectations from the company: An excellent environment to learn things and grow, especially for extroverts. People are always ready to help, and nice to you, sometimes a little too nice. Academic courses relevant to the project: Software Engineering, Machine Learning	2017- 18- sem1
belong.co, Bangalore	Implementation of word2vec, Neural Nets for different applications. Tools used (Development tools - H/w, S/w): Python, Keras Objectives of the project: Resume Parsing, Designation Ranking Outcomes of the project: Ranking of designations. Major Learning Outcomes: Word2vec Brief Description of working environment, expectations from the company: Great environment and flexibility. Lots of learning opportunities Academic courses relevant to the project: Machine Learning, Neural Networks, Information Retrieval	2017- 18- sem1

Company	Experience	Year
belong.co, Bangalore	Analysed email data from belong domain, to know better how employees were interacting with customers of Belong. Also leads in an account, frequency of communication. Worked with Python and Google sheets to do this simple analysis. Secondly, learnt about Elasticsearch queries and aggregations, to pull data from the company database. This data was then analysed to find people's average tenures when they changed jobs eg. (People moving from Microsoft to Jio). Tools used (Development tools - H/w, S/w): Python, Elasticsearch, PostgreSQL Objectives of the project: To identify trends in terms of average tenure of people at companies (eg. Jio/Airtel/Vodafone)if they quit after moving from other top companies (eg. Microsoft/Amazon/Google), helping hire people that fit better into an organisation on the basis of this. Outcomes of the project: Help our customers with this data analysis in targeting the right pool of candidates which would fit in well at their organisation. Major Learning Outcomes: Learnt about Python programming, working with pivot tables, databases and Elasticsearch. Brief Description of working environment, expectations from the company: The work environment at Belong was quite positive. People are hard working and driven. I personally had a great mentor, who guided me in my project. The employees at the company set the expectation according to what the intern knows. Else enough time is offered to learn a new skill/software/tool. A lot of freedom is also given to interns, people are helpful and approachable. Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
belong.co, Bangalore	Started as a talent advisor talking with candidates about potential job openings. Moved onto work with Analytics identifying metrics to monitor and creating dashboards using SQL to monitor the identified metrics. Tools used (Development tools - H/w, S/w): SQL Objectives of the project: To find the best time to get in touch with candidate and maximise the efficiency of talent Advisors. Outcomes of the project: Certain blocks of time were identified in the day which increased the Reply Rates and use of calendar was promoted to increase efficiency Major Learning Outcomes: Understood minute details that need to be kept in mind while cleaning data. Learnt about differentiating between relevant and non-relevant metrics while validating an experiment. Brief Description of working environment, expectations from the company: Company's work environment was pretty open with flexible work hours and possibility of working on weekends to clear backlogs. Also, everyone within the office was approachable whenever I faced a problem. Since, the Belong team has a large chunk of BITS almuni, I was able to find not one but a couple of mentors. Academic courses relevant to the project: None. Industry specific work.	2017- 18- sem1
belong.co, Bangalore	Did Topic Modelling in Python using machine learning packages such as flashtext and GuidedLDA Tools used (Development tools - H/w, S/w): Python, Django Objectives of the project: Standardization and verticalization Outcomes of the project: Was able to classify 5 million documents into various classes using a machine learning algorithm known as Latent Dirichlet Allocation Major Learning Outcomes: Topic Modelling, Latent Dirichlet Allocation, Machine Learning, Artificial Intelligence Brief Description of working environment, expectations from the company: Working Environment is really good and with decent enough of hard-work, PPO will be given Academic courses relevant to the project: Machine Learning, Neural Networks and Fuzzy Logic Student	2017- 18- sem1
Belong.co, Bangalore	Belong.co was my top choice for two simple reasons. It is a fast growing startup. It was the best opportunity to specialize in Machine Learning in industry. In hindsight, I am more than happy with the decision. The team at Belong entrusted me to redesign and build one of the fundamental product features. Belong introduced me to two helpful external mentors. One on engineering aspects, and other on Data Science aspects of the same. I designed, built, tested and deployed a machine learning model in production. One of the primary objectives when building this was to enable faster iterations. This capacity build should allow for incremental improvements. One of the key learning from this experience has been understanding the gap in both my software engineering and machine learning skills, even more so from an industry perspective. Luckily, I have a semester ahead to fill some of those gaps. A lot of learning has been experiential. This could include working in agile teams with daily scrums & sprint planning and the like. I have come to imbibe the importance and discipline of tracking the correct metrics. I am more appreciative of the importance of customer success and sales teams in a business. The experience of seeing the team grow from 30+ to 70+ people has been phenomenal. The learning curve has alternated between acquiring knowledge and wisdom. These lessons will serve me for as long as I can remember them. The time at Belong has not only helped me discover my weaknesses. It has also helped me leverage my strengths to create impact. E.g. The infrastructure now in place can scale to 5-10X times the present number of records. We can handle upto 50 times the data variety with only needing to write wiring code for the same. The accuracy of the feature has improved by 15-25%. At the moment, we are the best in the world. It was a humbling and rewarding experience. I am grateful for the support and guidance from the team at Belong. And even more so to the mentors for enabling me to be better than yesterday.	2015- 16- sem1

Company	Experience	Year
BG Shirke Construction Tech. Pvt. Ltd.	I was allotted four projects during my stay here at the company, that is, I was assigned four buildings of which I had to perform the design. Two of them were steel structures, one Reinforced Concrete structure and one composite structure. For all of these structures, I was the independent structural engineer. I was responsible for delivering the structural design report, structural drawings and fabrication drawings within the deadline. There were certain challenges unique to each project and it was huge learning opportunity, working on each of them. The steel structure had a Steel truss for it's roof and process of the design of the truss was a brilliant space to give way to your innovation and creativity as an engineer. The composite structure was an entirely new concept having steel members and an in-casing of RCC. The concrete structure, though only a G+2 structure, was located in Earthquake zone V, for which extensive dynamic computations had to be performed using response spectrum analysis, incorporating the effect of vertical ground motion. To sum it up, I believe it was a very comprehensive experience for an undergraduate civil engineer. Tool used (Development tools - H/w, S/w): ETABS, AutoCAD Objectives of the project: To prepare design report and working drawings of the allotted structures Major Learning Outcomes: Hands on experience as a structural engineer, working on steel, concrete as well as composite structures. Brief Description of working environment, expectations from the company: The best part about the company is that they do not treat interns and employees differently. Which means that they continuously assign you projects, of which you are the independent structural engineer and along with an architect, you have to complete the design and the drawings within the deadline. But the work culture is below average to say the least. Medium of conversation is majorly Marathi, you have to work 6 days a week and with the deadlines closing in, you'll have to stay back as long as it takes. So, I hav	2018- 19- sem1
Bharat Forge Ltd , Pune	New product development for the aerospace department including die design and metal flow simulation Tool used (Development tools - H/w, S/w): Objectives of the project: New product development of Transmission shaft Major Learning Outcomes: Forging processes, Die design, 3D Modelling Details of Papers/patents: Brief Description of working environment, expectations from the company: The company alloted projects based on the students interest and passion. The team was very helpful and made the environment positive Academic courses relevant to the project: Computer Aided Design Student	2019- 20- sem1
Bharat Forge Ltd., Pune	The project covers the range of issues in cost reduction of manufacturing a product and in-depth of cost reduction due purchase of raw materials and purchase of vendor. The project gives the brief idea on how to manage vendors and reduce cost of parts the detailed view of things required. Tool used (Development tools - H/w, S/w): Price list, excel sheet, phone Objectives of the project: Cost reduction in manufacturing Major Learning Outcomes: How to talk to vendors, estimation of discount, supply chain management Academic courses relevant to the project: SCM material science Name: Satvik Adarsh Kumar (2014B2AB0176P)	2018- 19- sem1
Bharat Forge Ltd., Pune	It was an okay experience to summarize overall. Didn't get the exposure to the work the company did, but had a decent industrial experience in terms of data management and analysis. My project for the company was to demand forecast and manage the inventory. This was a very basic exposure to the supply chain of a particular company. Over that I also helped the company to schedule the flow of the materials according to the customer's demand. We used backwards scheduling technique and successfully increased the productivity in the same amount of time. Also, I helped my department to improve the TPM (Total Productive Management) by using the 5S System and reduced the various wastes. Overall, the experience wasn't what I expected or needed but yet satisfying. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: To achieve maximum productivity by the help of techniques such as Demand Forecasting, Inventory Management and Backwards Scheduling Major Learning Outcomes: Backward Scheduling, Industrial Experience Academic courses relevant to the project: Scheduling Name: N Satya Ananda Gautam (2015A4PS0406P)	2018- 19- sem1
Bharat Forge Ltd., Pune	Conducted the time study for the operations used in Brinell hardness testing procedure and increased the productivity by automation. Tool used (Development tools - H/w, S/w): NA Objectives of the project: To increase productivity by automation Major Learning Outcomes: How to conduct time study, Components of automation Academic courses relevant to the project: Product Plan and control	2018- 19- sem1

Company	Experience	Year
BIS Research Pvt. Ltd NonTech , Noida	As it is a market research firm, my work there was related to the same. My main project there was to track the vast ecosystem of plastics. This included identifying raw materials, bulk materials, intermediates, plastics and derivative plastics. I also assisted in some professional reports by profiling companies, which is a chapter in the company's reports. Tool used (Development tools - H/w, S/w): The work there required great use of MS Office, mainly Word and Excel. Objectives of the project: The project aimed at tracking the plastics ecosystem and the companies manufacturing them. It also required segmenting the market according to intermediates, source and end- user markets. Major Learning Outcomes: 1) Learned about Report Ethics 2) Acquintance with technical searching tools 3) Familiarity with primary and secondary research tools 4) Learned about various emerging technologies Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment was good, especially in my team. There were activities conducted by HR team around all the festivals. The company is a market research firm so you get to learn much about the market and how it is segmented and analyzed. You also get to learn about different emerging technologies floating in the market. Academic courses relevant to the project: Principles of Management.	2019- 20- sem1
BIS Research Pvt. Ltd NonTech , Noida	Worked in healthcare department for a month as research analyst and updated the dashboard and filled the input sheet used to validate secondary research. Then was allotted in the sales team where i used to prepare DKIPs initially for my executives. After that i was allotted Global Liquid Hydrogen Market Report where i ran campaign on the report by cold calling and mailing, made a pipeline for my work to keep a track of the prospect. I had 15 running cases, 8 lost cases and 20 point drive cases under my belt. I have one confirm sale of USD 5,600 and expecting to close about USD 20,000. Tool used (Development tools - H/w, S/w): Advance Excel, Outlook, Albeit, powerpoint, Word, notepad. Objectives of the project: To Generate Revenue under the sales team by selling a market intelligence report Major Learning Outcomes: Learnt soft calling skills, draft mailing, sales negotiation, annual report analysis, and knowledge of different reports like Liquid Hydrogen, Blockchain in agriculture, Agri drones and robots and many other reports. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The working experience was great. You will have a balanced work experience here. I got a complete idea about running a startup, had a nice environment in the office. It was easy to interact with colleagues as well as senior executives. A specific project allotment gave me a major boost to commit a mistake and learn from them. The growth rate at BIS is good, as in this company if you do something good even the CEO of the company gets to know about and he will praise you by giving incentives and bonuses. BIS being a Bitsian startup provided me the liberty to change my field of work from research to sales. And if you don't expect a very PPO, then surely will be placed as BIS is an emerging tech startup and it has continued need of employees. Academic courses relevant to the project: Not relevant to acads.	2019- 20- sem1

Experience Year Company My work was regarding research in emerging markets. I had to make a comprehensive database on the available data of Surgical Robotics which would help in doing Market Research and Estimation. It also included product mapping of products given by reputed companies. I also had to make transcripts of calls held by company's researchers. Patent Analysis is the field of AI, ML, Surgical Robotics of over 8000+ Patents Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Market Estimation of Surgical Robotics Major Learning Outcomes: Work experience, refinery in secondary research, professional work life Details of Papers/patents: Future of Robotics in Medical Surgeries Brief Description of working environment, expectations from the company: My expectations where some more but it through time I got accustomed to the environment and the working environment was very friendly Academic courses relevant to the project: It was somewhat related to pharmacy as it involved research in surgical aspect. I got to know various robots which are used to do surgeries or drug delivery. Mentor Mentor comments: It's been a great time working with Shivam. He was instrumental in solving some challenging tasks of our BlueJeans Events Platform. He was highly motivated and dedicated to the Task assigned to him. Overall, his 2019-BIS Research Pvt. Ltd. performance in the tenure of Software Development Intern is quite impressive and I wish him a very good 20-NonTech . Noida luck in his future endeavours. Mentor comments: The team was moving or rewriting the project with the sem1 new technology stack. And Avinash had picked up the new project design very quickly and contributed in lot of key features.Re-write was a very heavy lifting task for the entire team, and Avinash had really contributed well sharing some of the loads of the team. He had contributed across the project and the few key areas are Permission flows, app Join flows and localizations which are very well delivered by Avinash. Overall Avinash is very sincere and dedicated in his work and quickly learns whatever is expected from him. Brief write-up on PS-II station: BlueJeans Network is a company that provides an interoperable cloudbased video conferencing service that connects participants across a wide range of devices and conferencing platforms. The interns are Junior Developer who are responsible for the following activites: Design, application front-end features that are part of every user's daily experience End-to-end implementation, including initial concept design, coding, unit testing and release to production The expectations are • Should be strong in Data structures, Algorithms and CS fundamentals. • Should be very good in Problem Solving abilities. • Must have good working knowledge in any one of the programming Languages like Java/J2EE,C/C++,C# Student Our work is on a website, build to connect people with video call without installing any application using WebRTC. The main context our work deals with the rewrite of WMC code base which is in React and Backbone JS into UICore(named) with the use of Typescript, Mobx, Styled components and MVVM model for better usability and readability. we have worked on many feature implementations which includes smart meeting, CPF flow, and accessibility. I have also worked to fix many bugs during my process of being 2019-Blue Jeans Network India with WMC. Tool used (Development tools - H/w, S/w): Jenkins, Typescript, Mobx, AWS, Node React and 20-Pvt. Ltd., Bangalore BackBone Js, Webpack, Sockect.io and styled Components. Objectives of the project: To Reduce the load sem1 time of a the website and make code base more readable. Major Learning Outcomes: Typescript, Mobx, AWS, Node React and BackBone Js, Webpack, and styled Components, sockect.io Details of Papers/patents : NA Brief Description of working environment, expectations from the company : The Working Environment is very good, The team is so friendly as well. Academic courses relevant to the project: Software engineering, OS and OOPS In this internship, i worked on the backend micro-services of the enterprise. Our team developed and improved the the various microservices in the micro-service architecture of the BlueJeans Networks. My tasks included various JIRAs like adding audit logs to increase the events that are audited in the auditmicroservice . I also wrote unit tests for update user password class using mockito and used DBUnit to mock the database for testing. I also improved some APIs to support new parameters which were not supported before by the API. I also made some api's open for public access after getting approval from the security team. My final task was to write a Database script in python to clean up the database which had some inconsistent entries resulting from a previous bug. Tool used (Development tools - H/w, S/w): JAVA, 2019-Blue Jeans Network India Jira, GIT, POSTMAN Objectives of the project: Development And Improvement Of BlueJeans Backend 20-Pvt. Ltd., Bangalore Microservices Major Learning Outcomes: I learned about how tasks are being alloted to employees using sem1 JIRA to the company employees and how an enterprise set time bound targets. I also learned cooperation among various teams that make an enterprise function. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment of the enterprise was really good. All the people were very approachable and willing to help. The interns were treated as full time employees and were made to be a part of code that is actually used by the enterprise. Academic courses relevant to the project: Object Oriented Programming, Computer Networks, Database Management Systems Bangalore Student

Experience Year Company At first I was asked to understand the code structure of the existing project on which I had to build on.I started to learn BackboneJs, Jquery and basic html.I started build the basic stuff required for making an web interface for our product. Due to unavailability of design specs and no backend Api's i was asked to mock my backend Api's on my local machine. I used NodeJs and Mysql database to mock the data and passed it my UI.Later, I worked a bit on IOS app for a short time. I also worked on the backend where I had to filter the list with a query parameter by accessing the DynamoDb in java. After all the backend Api's and design specs were ready, I worked on the remaining part of projec.It is now globally used by all Bluejeans users. Tools used (Development tools - H/w, S/w): Sublimetext, Eclipse, Xcode, chrome dev debugger 2016-Blue Jeans Network India ,DynamoDb,Mysql,BackboneJs, Jquery,html,css,Bootstrap,swift. Objectives of the project: To make web 17-Pvt. Ltd., Bangalore admin user interface for the list of huddle rooms and detailed info of each room.(Huddle is the new sem1 product of Bluejeans) Outcomes of the project: Made an admin user interface for list of huddle rooms which went to production globally for all Bluejeans users. Major Learning Outcomes: 1.To make a website using an MVC framework(BackboneJs) 2. Learned the entire software development cycle. 3. Learnt to make API's by accessing different databases Mysql and Dynamodb. Brief Description of working environment, expectations from the company: The working environment is friendly and everyone is quite helpful.There was no pressure during the entire duration.The company expects interns to interact mostly with their employees and participate in all cultural activities. The initial work was to understand the backbone js code for webrtc sdk and to write unit tests for each and every function of the sdk to ensure industry standards. After completion of the Test Suite, it was to be combined with the already working task runner. It will run on every build to ensure that no errors occur on subsequent versions of the software. The Next work was to fix a few bugs in the Firefox version of the Bluejeans Webapp. Also worked on making APIs for a client to fetch local volume and reconnection timers. I was also involved in the local hackathon team that won the first prize. For the project a docker was made which would stay on a windows screens user as a native Application removing the need for frequent alt+tabs. I was in-charge of making the appearance of the docker. Also solved jiras including making a reconnection Api for the 3rd party client and also an API which can be used to see the local volume for the user. The reconnection API would detect the disconnect state and initiate a timer which would attempt reconnects at increasing intervals of time.(2s,4s,8s...32s). Tools used (Development tools - H/w, S/w): Tools 2016-Blue Jeans Network India and Languages used 1.Code Editor - Sublime Text 2.Languages – JavaScript, HTML, Jquery i) JS Frameworks 17-Pvt. Ltd., Bangalore used - Backbone Js, Mocha, Chai, Require Js 3. Debuggers - Chrome developer tools, Firebug 4. Bug maintain sem1 system - Jira 5. Version Control - Git 6. Api testing - Postman 7. Automation - jenkins 8. Task-Runner - Grunt Objectives of the project: To create a Unit-Testing Suite which runs on any commit on a repository and provides feedback in the form of an email. Outcomes of the project: Successfully created a unit-testing Suite for testing WebRTC-SDK. Major Learning Outcomes: Learnt about WebRTC Api's, BackBone js, Automation, Unit Testing Brief Description of working environment, expectations from the company: By working in Bluejeans Network, I have gained a lot of exposure as to how a tech company operates and what kind of work is given. Also, I have gotten acquainted with languages like JavaScript, frameworks like Node and Backbone and tools like Git. I was given work that was directly used by the releases made by the company making me feel that my work is important. I have grown on both a Professional and Personal level from this experience. The company does not have any pre-requirements although knowledge of JavaScript, C++,Html, Css could speed up the work. Bluejeans is a cloud application. It is divided into number of micro services. Each micro service performs set of task. There are about 300 micro services across all environments and partitions. It is impossible to manually monitor all of these whenever there is a new update and compare it to the other partitions. So there is necessity of a new monitoring tool which uses data provided by New Relic monitoring tool. So the application gathers data in intervals runs anomaly algorithms on time series and report anomaly to slack channel. There is a UI available for detailed anomaly information. Tools used (Development tools - H/w, S/w): Mongodb, Nodejs, express framework, javascript, python, front-end. Objectives of the project: 2016-Blue Jeans Network India Maintain the data on different services, Perform anomaly operations in real time, Notify anomaly to the 17-Pvt. Ltd., Bangalore designated user. Outcomes of the project: Maintain the data on different services, Perform anomaly sem1 operations in real time, Notify anomaly to the designated user. Major Learning Outcomes: Learned how to implement the complete application stack. Managing and maintaining database. Brief Description of working environment, expectations from the company: Bluejeans provided very good working environment where you can directly communicate and interact with directors. The environment is very friendly and understanding, people wont pressurise too much(at least on interns). The company expect enthusiast employees. The skill and knowledge may not be required to survive here as they give ample amount of time to adjust to new technology.

Company	Experience	Year
Blue Jeans Network India Pvt. Ltd., Bangalore	Worked on Front-End Development for the PrimeTime product app. Tools used (Development tools - H/w, S/w): Javascript frameworks including Node.js, Marionette.js, Backbone.js etc. Objectives of the project: Develop Maya, the UI repo of the product Outcomes of the project: Working features of Maya Major Learning Outcomes: Javascript frameworks Brief Description of working environment, expectations from the company: Excellent atmosphere for learning, very conducive and helpful employees. Faculty NAME: ANJANI SRIKANTH KOKA Comments: Expectations from industry: Project Areas: Marketing&Sales, Vendor Management, Operations, Analytics; Not much technical skills needed but advanced excel knowledge and strong soft skills are very much needed. Students will work on different projects during their PS II Student	2016- 17- sem1
Blue Jeans Networks India Pvt. Ltd., Bangalore	Blue Jeans is a Bitsian startup, which deals with cloud based video conferencing in commercial world. It was founded in 2009 by Krish Ramakrishnan and Alagu Periyannan. The experience at Blue Jeans was highly enriching and educative. It helped me hone my skills and gain confidence over coding more. It also provided me with better personal communication and industry experience. I am sure that I want to pursue my career in Networking, than anything else. The working culture of the office is extremely good. The teams go for regular outings and parties to rejuvenate and revive ourselves. The food provided is awesome there. The first two weeks was introduction to what architecture the company uses and then to various working groups in the company. Then, we were allotted our respective groups. I was allotted NFT (non functional testing). The team is extremely amiable and helpful. I was guided very well by my mentor and team mates. I worked on two projects which individually provided me with introduction into Ruby, JavaScript, Haml, Bootstrap and MongoDB. The experience was highly enriching and helped me gain confidence over my coding skills. My project was highly appreciated and I gave a demo in front of the entire company including folks from Mountain View, California as well. I was finally offered a Preplacement offer by the company and I am planning to join here next year. The facilities and perks are really appreciable. The company takes care of its employees prior to anything else. I am truly happy and obliged to all who helped me get here and prove myself. Avinash MSRSR Vakkalagadda (2012AAPS197H) Discipline: ECE 'Great place to work' is how I would describe Blue Jeans Network. The company aims to bring great minds together to meet, share ideas and reach their audiences through the power of video collaboration. Blue Jeans' cloud-based platform has made video communication easy, secure and scalable, giving thought leaders in business, education, entertainment, and media the power to interact face-to-face with an	2015- 16- sem1
Bosch research and technology center	Work based on machine learning. 2 fields, computer vision and IoT. Tool used (Development tools - H/w, S/w): Python, tensorflow. Objectives of the project: Reducing the complexity of a neural network Major Learning Outcomes: Neural networks, python Academic courses relevant to the project: Neural networks and fuzzy logic (Swiggy), Bangalore	2018- 19- sem1
Bundl Technologies Private Limited	Growth of swiggy select Tool used (Development tools - H/w, S/w): Excel, sql, r proggramming Objectives of the project: Finding ways for improving select restaurants Major Learning Outcomes: Tech. Tools excel, sql etc Brief Description of working environment, expectations from the company: Supportive people, working with excel some idea of data analytics Name: Krishnam Sharda (2015ABPS0870P)	2018- 19- sem1

Company	Experience	Year
Bundl Technologies Private Limited	Conversion is one of the most important metric to judge upon the growth of business. My project involved working with different metrics, different departments, and different softwares, which gave me an opportunity for immense learning. I've worked on various experiments, so as to improve the conversion and customer experience. I also worked on Loyalty Program – Swiggy SUPER. I coordinated with Analytics and Supply team to work on additional benefits for SUPER, along with measuring the impact of those benefits, and how they should be scaled up in future. Tool used (Development tools - H/w, S/w): S/w - Excel, PowerPoint, SQL (Dbeaver) Objectives of the project: To increase the conversion and retention rate by understanding the consumer behaviour across all the platforms and developing business models and experiments to implement and track the changes. Major Learning Outcomes: Learned about advance functions in excel, formulating and optimizing SQL queries, different metrics (ROI, AOV, OPD, etc.), customer insights, their needs, and how can we tweak some offerings to match up with their needs. Gained first-hand experience on creating short hypothesis, working in crunched timelines, and campaigns management. Brief Description of working environment, expectations from the company: The company focuses on 8 key values: Be humble; Standup, disagree and commit; Be honest, display highest levels of Integrity; Strive for excellence; Consumer comes first; Exhibit bias for action; Act like an owner; Always be curious, always be learning. Work culture imbibes these key values, which makes Swiggy stand out first. Academic courses relevant to the project: Principle of Economics, Supply Chain Management, Operations Management Name: Ashutosh Purohit (2015ABPS0501P)	2018- 19- sem1
Bundl Technologies Private Limited	Discounting is one of the most important metric to judge upon the growth of business. My project involved working with different metrics, different departments, and different software which gave me an opportunity for immense learning. I've worked on various experiments, so as to improve the conversion and customer experience. I also worked on Expansion. I coordinated with Analytics Supply,HR and Ops teams to work on additional benefits for the expansion, along with measuring the impact of those benefits, and how they should be scaled up in future Tool used (Development tools - H/w, S/w): Excel, Powerpoint, SQL, PowerBI Objectives of the project: Expansion 4.0 is a plan to build a further depth into the country most efficiently and effectively and Creation of a platform to measure growth due to such couponing strategies Major Learning Outcomes: Learned about advance functions in excel, formulating and optimizing SQL queries, different metrics (ROI, AOV, OPD, etc.), customer insights, their needs, and how can we tweak some offerings to match up with their needs. Gained first-hand experience on creating short hypothesis, working in crunched timelines, and campaigns management. Brief Description of working environment, expectations from the company: The company focuses on 8 key values: Be humble; Standup, disagree and commit; Be honest, display highest levels of Integrity; Strive for excellence; Consumer comes first; Exhibit bias for action; Act like an owner; Always be curious, always be learning. Work culture imbibes these key values, which makes Swiggy stand out first. Academic courses relevant to the project: Principle of Economics, Supply Chain Management, Operations Management Name: Pranavpriya Dubey (2015A1PS0710G)	2018- 19- sem1
Bundl Technologies Private Limited	Worked on the Expansion Project doubling the number of cities serviced by Swiggy. Work ranged from Data Analysis to Project Management to devising Strategies. Tool used (Development tools - H/w, S/w): Excel, SQL, Google Maps, MAPBOX Objectives of the project: Exponential Expansion: Expanding Swiggy to Tier-II and Tier-III cities Major Learning Outcomes: Gained Project Management Skills, Leadership Skills, Data Analysis Skills using Excel and Market Research Skills Academic courses relevant to the project: Marketing Research, POM Name: MOHANA RUPA M (2015AAPS0180H)	2018- 19- sem1
Bundl Technologies Private Limited	The objective of this project is to improve the pace at which we can finish the preparation of the item without compromising on the quality of the food. We plan to lay down a set of management principles which if implemented can provide the ideal results. Apart from laying down a framework for the future, it majorly deals with reducing the dead time in the system to ensure a faster delivery to the customer to increase his gratification and satisfaction. We undertook various observation methods to come to conclusions and also tested some out of the box solutions to improve the results and obtain our final goal of a delivery time of 30 min, a standard which has to be sustainably met. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: improve the pace at which we can finish the preparation of the item without compromising on the quality of the food Major Learning Outcomes: Working with excel, professional report writing, corporate working experience, team collaboration and work Academic courses relevant to the project: Principles of management Name: Kapil Agrawal (2014B3A30579P)	2018- 19- sem1
Bundl Technologies Private Limited	Handled the configuration of trade discounts of restaurants across all over India. Analyzed the performance of different campaigns and festivals all over India. Tool used (Development tools - H/w, S/w): MS Excel, SQL, DBeaver, Power BI Objectives of the project: To gain understanding of how trade discounts helps in achieving Business Goals for platform as well as supply restaurant partners Major Learning Outcomes: Excel proficiency, SQL, business understanding Interpersonal communication skills Academic courses relevant to the project: Mathematics and Statistical Methods (MSM)	2018- 19- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Improved growth on Swiggy's SUPER subscription program and stream lined processes to improve efficiency Tool used (Development tools - H/w, S/w): SQL, Advanced Excel Objectives of the project: Improve growth on the Swiggy loyalty program Major Learning Outcomes: Proficiency in SQL, Stakeholder Management, Understanding business economics Details of Papers/patents: Brief Description of working environment, expectations from the company: Great work culture. The company works in a very structured manner and people stick to deadlines. Academic courses relevant to the project: POM, POE, C programming	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Worked on Hyperlocal Growth project to improve consumer perception of Swiggy by improving critical metrics. Also worked on building up new competition intelligence projects & working on regular project's run in the field. Worked on ProfitLoss analysis of area extension project Tool used (Development tools - H/w, S/w): Microsoft Power BI, Tableau, Mapbox, Excel, MySQL Objectives of the project: Unlocking growth potential at hyperlocal level through identifying target zones. Major Learning Outcomes: Improved ownership skills, stakeholder management, time management, presentation skills, analytical skills Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment in the company is really positive. The people are really helping and they give interns their time to learn and then work on the problems. Working in Swiggy has been a real learning experience with great intellectual minds around me. Academic courses relevant to the project: POE, POM	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	I worked in the Brand Factory at Swiggy, the chief of which was to manage a pilot for virtual brand creation in some cities and working on growth for existing Brands. The pilot involved talking the team through the whole process, conducting weekly review calls, having calls with partners and setting up the brands for success. The Growth aspect involved studying different accounts in terms of Visibility, Menu, Pricing, Discounting, Competition Bench-marking and Brand Positioning and finding the best fit for each account. I also worked on revamping photo-shoot guidelines owing to my fondness for films, and I developed several data based models to improve brand performance. I studied some brands for Access, and presented an altered target setting for performance as well. Tool used (Development tools - H/w, S/w): SQL, Excel, Photoshop, PowerPoint Objectives of the project: - To manage a Pilot on Virtual Brand Creation in a few cities, to drive growth for existing brands, develop data-based models for betterment of business Major Learning Outcomes: A comprehensive understanding of Data Analytics, Project Management, Photography studies, Pricing & Discounting Strategies, Budgeting, Expansion Plan formulation and Business Development Details of Papers/patents: Brief Description of working environment, expectations from the company: The Brand Factory Team was a space that encouraged creativity, and allotted me a project suited to my learning and skill set. The organization is a very encouraging place to work in, with everyone being cordial and conversational. The leadership team are also very approachable, taking interest in making the environment as comfortable as possible for the interns. The organization encourages Ownership of work and a Bias for action. The team's expectations are realistic, with minimal work outside office hours and no work on weekends. The social events are tremendously enjoyable, and the events are very welcoming. All in all, Swiggy is a wonderful experience for someone just starting their care	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	I worked in the New Supply - Ops division of Swiggy. My team took care of the daily operations of Swiggy Cloud kitchens. Most of my work involved analyzing the processes implemented in the kitchens and trying to come up with ways to improve these processes. Major projects I was given involved analyzing and trying to reduce the complaints by customers. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Reduction of Missing complaints in cloud kitchens Major Learning Outcomes: Operations management, Supply Chain Management, Analytical Skills, Problem structuring and Problem-solving skills Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is very good. Everyone around is approachable and are always ready to help you. You will be given real time projects even though you are an intern and the analysis you make will also be presented to higher ups in the organization. All teams know that you are from an engineering background, so they do not expect you to know the analysis techniques etc., but once you join you are expected to learn and develop the skills required quickly. Your mentors will spend time with you and make sure you understand the context i.e. why you need to do a particular project and the skills needed for the project. They also teach you some analytical techniques that you need to finish your project. Academic courses relevant to the project: Principles of Management	2019- 20- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Worked from scratch on new product launch. Devised entire Go-To-Market plan for the product which involved supply strategy, marketing, product development and growth strategy. Conceptualized process flows for data ingestion and sized the available market opportunity for the product. Estimated and optimized targets for the launch and defined check and success metrics. Tool used (Development tools - H/w, S/w): Excel, SQL, R Objectives of the project: To plan Go-To-Market Strategy of a product by working on different aspects of supply and growth strategy. Major Learning Outcomes: Business Understanding, Product Management, Data Analytics Details of Papers/patents: Brief Description of working environment, expectations from the company: Swiggy is one of the most consumer-friendly product available in the market. Environment is very enthusiastic and friendly. Appropriate mentorship is provided at every stage of the project. Team believed in high ownership of work and involved me in crucial decisions. Early visibility on skills required from company can be beneficial. Academic courses relevant to the project: Principle of Economics, Business Analysis and Valuation	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Understanding customer behavior and reactivating dormant customers through experiments. Changing delivery fee across cities to gain additional revenue. Increasing the AOV of the platform. Tool used (Development tools - H/w, S/w): SQL, Power BI, Excel Objectives of the project: To increase delivery fee revenue across the platform. Reactivating dormant customers back on platform. Increasing the AOV for the platform Major Learning Outcomes: Strategy and growth; SQL; Designing experiments; Leading marketing campaigns; Data analysis; Details of Papers/patents: - Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Principles of economics, supply chain management	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Swiggy- Sides and Drinks is a service provided by the Value Added services team with a motive of enhancing the consumer experience and at the same time, provide a better value proposition to the restaurant. The project can be divided in two parts: The Supply part focuses on setting up a B2B marketplace for food items such as Trail Mixes, Packaged Beverages, Artisanal Yoghurt, etc. The demand part deals with usage of menu digitisation properties of the Swiggy food App in order to create a demand for these food products. Tool used (Development tools - H/w, S/w): Snowflake, Excel, Google Sheets Objectives of the project: Improve the Average Order Value of Swiggy Platform, Incremental Revenue Stream for Swiggy Major Learning Outcomes: Learnt how to set up a business from end to end, Improved Professional Communication Skills, Product Management, Marketing Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: None	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Work can be majorly categorized into two categories, first being catalog management and the other being business analytics. As for the first, the entire catalog management for the National Alliance Brands was taken care of during the entire course of the project. As a part of this, I have worked on Bundl's own catalog management system and learned a lot about the approvals required to start a restaurant in a particular area especially on an cloud kitchen platform & have tried to understand the Correct Menu Strategies, may it be in the form of the right food images or the right descriptions in the menu. As a business analytics employee, I worked for the entire duration of the internship on SQL and continuously delivered the partner with the required analysis to grow the business. I was overall responsible to handle the growth of 5 brands and 74 outlets in general. During the course of my internship the orders for the brands grew by 56% while the GMV for the brand grew by 112%. Tool used (Development tools - H/w, S/w): SQL, Excel, Catalog Objectives of the project: The project focused on growing the various National Alliance brands partially owned by Bundl Technologies Pvt. Limited by regular analysis of performance and providing an in-depth analysis of its own performance and performance of the platform. Major Learning Outcomes: Menu Excellence, Catalog Management, Business Analytics, Consumer behavior analysis Details of Papers/patents: Brief Description of working environment, expectations from the company: Swiggy has a friendly working environment. Managers and top management are easily approachable and willing to teach. Academic courses relevant to the project: POE, POM, International Business, Operations Research	2019- 20- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Swiggy GO is new initiative and was in testing phase when I joined the team. So helped in checking different metrics required to check whether the product is ready to launch. Found problems with the flow and worked with different teams to solve the issues. After launch tracked the growth of business by analyzing different metrics to ensure everything is working efficiently and customers have good experience. In operations, worked on different issues faced by delivery partners and different metrics affected by it. For further growth of the business worked on categorization of the use cases and requirements of the specific features in product for merchants. Tool used (Development tools - H/w, S/w): SQL, Excel, Power-point Objectives of the project: Launch and Growth of Swiggy GO Major Learning Outcomes: Business Development and growth, Data Analytics, SQL, Project Management Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Supply Chain Management	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	I have done 2 projects during my internship. 1. My first project is ops based project I had closely worked with the Operations Team and learned how the Delivery Executive works, and the restaurant supply system works. 2. My second project is to improve the customer experience by giving awareness/visibility to various internal and external stakeholders my creating various dashboards related to customer experience. Tool used (Development tools - H/w, S/w): Advance Excel, Excel VBA, SQL and Power BI Objectives of the project: To improve the Customer Experience using help of both Ops and Supply Major Learning Outcomes: 1. Gained knowledge on advance excel. 2. Gained hands-on experience in writing SQL queries for data fetch and analysis of the procured data to solve real-time problems. 3. Developed automated reports using Excel VBA and python codes. 4. Developed enhanced Details of Papers/patents: Brief Description of working environment, expectations from the company: The work culture of the company is good. The team is very helping in nature. Academic courses relevant to the project: None	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	P1: To assess Pop performance in a city by quality of Pop supply at a polygon level using a score calculated based on the various attributes listed below Cuisine Breadth Cuisine Depth Revenue Score Quality (ratings, RDC, IGCC % of W&X category restaurants. Other metrics like packaging, hygiene, OOS, Ar2P(cuisine level benchmark) will be added later.) P2: To generate Pop acquisition list which Can increase the quality of supply at a grid polygon level (2*2 grid polygons considered to ensure that supply density is high) Can be easily read/interpreted by SMs for seamless acquisition Tool used (Development tools - H/w, S/w): Excel, SQL, ACCESS Objectives of the project: To assess Pop performance in a city by quality of Pop supply at a polygon level Major Learning Outcomes: The final view is restaurant oriented making it similar to BAU modus operandi for acquisitions leading to seamless execution on ground The restaurants are prioritized based on the incremental benefit they can offer leading to better RoI of sales bandwidth Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: NONE	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	1. The work majorly focused on business development. 2. The newly launched business line called Swiggy GO had multiple verticals under it, namely, Business, Operations, Expansion and Growth 3. Under business, the major work was data based where one had to pull data and crunch numbers and help in understanding the leadership by giving timely insights and updates. 4. In Operations, it was focused on the delivery fleet and analysing the metrics that were dependent on them. Involved scrutinizing of the training modules and improving serviceability of the business line. 5. Growth involved understanding the customer requirements and positioning the product accordingly in terms of the pricing, offers, marketing initiatives etc 6. Visiting & Launching of new cities and ensuring all key customer experience and operational checkboxes were ticked before launching. Tool used (Development tools - H/w, S/w): SQL, Excel Objectives of the project: Developing the new business line and supporting the various teams in achieving the key targets Major Learning Outcomes: 1. Communicated effectively & worked with team members to figure out the possible ways and means to the situation and accordingly taking appropriate decision. 2. Proactively understanding the business nuances and applied it to meet the end objectives. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Business Analysis, Principles of Economics & Management, Business communication etc	2019- 20- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Swiggy's Value Added Service charter aims at ease of doing business for our partners across the restaurant life cycle by improving both Top line & Bottom-line. The aim is to help the partners expand to newer locations within a city or moving into a new city and augment their source of revenue. Thus, also providing an incremental source of income to Swiggy. The project involves working with different metrics, different departments (both internal and external), and different software, which gave an immense learning opportunity. Also, had the opportunity to work on various pilots/proof of concepts wherein the outcomes were two-fold: a) improve the reach of different brands b) improve restaurant partner's experience by increase their Average order value by Menu Augmentation. The work also involved coordination with Analytics and Finance team to work on additional benefits for Sides and Drinks, along with measuring the impact of those benefits, and how they should be scaled up in future. Tool used (Development tools - H/w, S/w): Excel, SQL Objectives of the project: To bridge the meal gap in restaurants menu and also generate an additional revenue stream for Swiggy. Major Learning Outcomes: Management, Communication Skills. Details of Papers/patents: Brief Description of working environment, expectations from the company: The company has a good working environment in terms of learning experience. The people here are quite friendly and are ready to help you out to learn new things and are open to share information. Academic courses relevant to the project: Principle of Economics, Business Analysis and Valuation.	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	Working with the expansion team, our primary goal was to drive growth in 400+ cities across India. I worked with my manager and together we coordinated with city teams across India, with the relevant stakeholders and made use of various growth levers like breakfast initiation, long distance orders, discounting strategies, commission upsells, demand supply-gap study, launch support, etc. Along the course of the project, I learnt extensive data analysis, stakeholder management, and economics of the business. Tool used (Development tools - H/w, S/w): SQL, Excel Objectives of the project: To drive growth in the newly launched cities using various growth levers, coordinating with various stakeholders and analysing data. Major Learning Outcomes: Starting from launch support, to being an active member in spearheading the growth POD campaign, and undertaking various projects like breakfast initiation, discounting strategies, MoU digitization, etc., I have learnt a great deal about stakeholder management. Details of Papers/patents: - Brief Description of working environment, expectations from the company: The working environment was quite electric. My manager and mentors were passionate and easy to approach, and eager to help and make me learn new things. The culture is quite action-driven and promoted taking ownership for your work, which is a very good approach. If I convert and get a PPO I will be joining as a business associate. Academic courses relevant to the project: Principles of Econimics	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	i) One Major Project that I was program managing the setting up a communication link between the Business and Operations team (for around 200cities) - here I conducted reviews between both the sides, took followups for actions and did additional analysis from the Operations front for various reasons. ii) Another major project that I was entrusted with was that of handling and managing the Delivery Fees of about 400 cities - this being a good lever for both growth and Unit Economics, so proceeding with caution while dealing with this tradeoff. Also creating strategies keeping this in mind and analyzing the impact caused once the strategy goes live. Tool used (Development tools - H/w, S/w): Excel, SQL Objectives of the project: i) Setting up communication link so that things get resolved. ii) Increase in Monetization through Del Fee Major Learning Outcomes: Stakeholder Management, Program Management, Strategy, Business Growth and tradeoff with Unit Economics Details of Papers/patents: - Brief Description of working environment, expectations from the company: The working environment is very dynamic, the people here are full of energy and compassionate about their work which is a very motivating environment to be in. Academic courses relevant to the project: PPC, SCM, POE (None of them had that much relevance)	2019- 20- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy) - Nontech ,	My work was majorly in the field of data science. I had to do analysis like - user segmentation analysis, cohort analysis, root cause analysis, etc on a daily level. The tools used were SQL (Snowflake), Microsoft Office and Google suite. Swiggy, Bangalore is the company's HQ, so for any schemes that was formulated and then rolled out PAN India basis my analysis had to monitored and kept track of. So telephonic conversations and applications like Slack, Hangouts & Meet are used on a daily basis. I was also allocated a Sales Project where other than data extraction, I also had to talk to restaurant owners either on phone call or by arranging a meeting. Under this, I converted 80+ partners for a promotional campaign hosted by Swiggy and Pepsi together. Graphics designing was occasionally required. Tool used (Development tools - H/w, S/w): Snowflake for SQL, Microsoft Office and Google Suite of apps Objectives of the project: First Project - To use data analysis techniques to predict the return on investment (ROI), growth and new user acquisition for restaurants not participating on Ads for strategic planning based on segments. Major Learning Outcomes: Data Analysis and Coding Skills, Communications skills needed for Sales Pitching, Leadership and Team-work skills, Time Management Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is very close to a start-up but with slightly better organized teams for distinct tasks. My team was very encouraging towards improvement of my coding and analytical skills in the beginning which was extensively used during the course of PS. Team parties and other social events are monthly organized which are fun to attend to. Academic courses relevant to the project: Quality Control, Assurance and Reliability, Production, Plan & Control, Supply Chain Management	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	I was working in the Swiggy Stores department. My work revolved around data crunching, root-cause analysis and a little bit of operations as well. Projects: 1) Root cause analysis of Unfulfilled Orders 2)  Demand Projection & Supply Planning Tool used (Development tools - H/w, S/w): SQL, Microsoft Excel Objectives of the project: To improve customer experience by improving metrics like fulfillment rate, availability, delivery times, etc Major Learning Outcomes: Learnt tools like SQL & Excel. Written communication skills, Problem Structuring, Project Management, Root Cause Analysis. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Supply Chain Management, Principles of Management	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	I am part of the Non-Delivery Use Case (NDU) team (New Division in Swiggy) from the inception, where our aim is to launch the Swiggy Food Court (SFC) product in areas such as Airports, Malls, Highways, Theaters etc. I was in touch with key stakeholders from major organizations like Bangalore International Airport Ltd, where I was project managing the complete pilot This included pitching our product to our client, coordinating with internal as well as client's teams and most importantly, I was a key stakeholder in all discussions to shape the project in the right way (From Stakeholder meetings to Internal Alignment meetings with COO Swiggy and even part of negotiations with both the party's Legal team, Marketing team etc.! Tool used (Development tools - H/w, S/w): Software: Snowflake - For retrieving relevant data PowerBI Dashboard - For retrieving relevant data MapBox - Geo-mapping locations to retrieve data Objectives of the project: Implement new product developed by our team to test our proposed use case - Enable Swiggy to be part of everyone's life by catering to their needs wherever they go (Malls, Airport, Highways, Theaters, etc) Major Learning Outcomes: We validated the following points: 1. Verified that our product adds immense value to our customers (Queue less, Saves time etc) 2. One of a few solutions that is UE positive from day 1 3. If we scale up, we will surely be a lot more sustainable. Details of Papers/patents: Brief Description of working environment, expectations from the company: I joined Swiggy as we are technically a Startup - Hence more exposure: But the extent of trust and exposure that our teams have bestowed to an intern like me, allowing me to take my own decisions is absolutely amazing and I am very grateful for this!! With respect to my project, deploying our new product Swiggy Food Court (SFC) at Bangalore International Airport - Team allowed me to initiate a startup and watch it grow!! Academic courses relevant to the project: Effective Public Speaking, Supply Chain Management,	2019- 20- sem1
Bundl Technologies Private Limited (Swiggy) - Nontech ,	There were largely three projects i was involved in during my internship 1) Efficiency-I had to build a model to find the efficiency of the discounts shown on the app. 2) Effectiveness-I had to develop a business which tells how effective are we in giving discounts on app which was further used to give targets to sales managers all over India. Tool used (Development tools - H/w, S/w): SQL,Excel,Python Objectives of the project: To determine effectiveness and efficiency of discounts Major Learning Outcomes: I learnt how to do data analysis over a large chunk of data and think in a quant funnel view to solve a business problem Details of Papers/patents: None Brief Description of working environment, expectations from the company: The team was simply amazing. My team thoroughly believed in work hard. Academic courses relevant to the project: POE	2019- 20- sem1

Company Experience Year

The business performance of the Private Brands had to be tracked on a day-to-day basis in order to be able to identify dips and critical signs before it is too late, and to take necessary corrective actions. I took upon the project to automate this entire exercise. The model automatically updates the pivot tables, runs the macros and converts the data into a consumable format. The entire process has become much more efficient owing to the robustness of the model. The automation of this reporting process has led to devoting more time on other productive activities such as conducting deep dives and more thorough analysis. When the leadership and management set the targets for the Private Brand kitchens, they do so at a month level. However, this is not a realistic target since it has not been broken down on a day-to-day level. There needed to be a constant phasing out of the targets that give the business teams at different cities an idea of day-to-day goals. I built another model that slowly ramps up the targets such that by the end of the month, we achieve the stipulated targets. This was done by taking into account the rate of growth of the business in the previous month and the differential AOV and GMV during weekdays and weekends across each city. Sizing of the breakfast and late-night slot was also done to understand the market potential. Tool used (Development tools - H/w, S/w): Softwares: Microsoft Excel, SQL, Snowflake tables Objectives of the project: To build a robust model that provides a snapshot of the business performance through which dips and slumps in business can be quickly identified and corrective action be taken. Major Learning Outcomes: This first stint in corporate has been marked by various learning outcomes, memories and experiences. Not only did I acquire the hard skills for completing the projects such as coding in SQL, mastering advanced MS Excel techniques and the different method Details of Papers/patents: A policy paper on why the home-style brand 'homely' won't work in Coimbatore was

2019-20-

20sem1

Bundl Technologies Private Limited (Swiggy) - Nontech ,

**Bundl Technologies Private** 

Limited (Swiggy) - Nontech,

The aim of REALM and EI2 project is to build a sustainable launch model for tier-4, tier-5 cities with a very low cost target of 40k and. The guardrails set for this project were launching the cities remotely without any Swiggy launch manager, sales manager or field recruiter going to the city by exploiting online channels like Restaurant and Delivery Executive on-boarding using Whatsapp and e-mail. Another channel of on-boarding through tele-calling is employed to push the leads to communicate through Whatsapp. Total of 5 cities were launched. 12 more cities were project managed. The impact of platform level cancellation initiatives on 408 emerging India cities was analyzed. Tool used (Development tools - H/w, S/w):

Snowflake, Excel Objectives of the project: Creating a model with reduced launch cost and fixed operational cost owing to the low potential of the cities. Major Learning Outcomes: Project Management, Resource Management Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Principles of Management Mentor Mentor comments: Students are interactive and knowledgeable. They are proactive in solving the tasks on time. Brief write-up on PS-II station: All the three stations are software based organizations. The general expectations from stations are students should be from computer science background (Qubole) and if not, they should have done electives or acquired enough skill sets on Python, Java, Database, Spring, Hibernate

published internally. Brief Description of working environment, expectations from the company Academic courses relevant to the project: Technical Report Writing, Supply Chain Management, Project Appraisal

2019-20-

sem1

Bundl Technologies Private Limited (Swiggy), Bangalore etc Student

Practice Schools have always been a great learning and a plus point for all the students as they get a fair idea about how to work in the organizations, what is the work culture like, how to approach the solutions in the most efficient and essional manner. So when we talk about major learnings, one would be definitely the way of communicating at a essional level. No matter how good one is when it comes to communication but channelizing the communication in the right direction is what one would learn from Practice Schools. Like uttering the most appropriate piece of information so that its gets easier to work on their respective tasks. Team work is also an important skill which you are likely to acquire during Practice Schools. Transition from academic to Industry depends on what kind of work is allotted to you. If you get work in the area that you are interested in or something which is relevant to the courses you have done in the college, then definitely you could feel the transition. Transition from learning the basics to actually implementing your learning in the essional word. Whereas the transition might not be that smooth if the work doesn't fall under your interest area or is not relevant to the courses you have done back in college. Talking about the take away from these five and a half months work in the industry, as already highlighted, team work, channelizing the communication skills in right direction, how do we on a essional level. In some way I am more than just glad that I got a start-up as my PS Station and hence got an opportunity to dig deep into the core functionality of the company so it helped me figure out how is the working culture in the startups and you might end up working on strange projects which are nowhere relevant to your field. But that's like an glimpse of you stepping out of your comfort zone and trying to put in more efforts. Gelling up with the team, so that the work is more of a fun task rather than burden. Rishav Gopalka (2012D2TS967P) Discipline: General Studies Swiggy is an Indian online food ordering and delivery platform founded by Sriharsha Majety, Nandan Reddy and Rahul Jaimini in August 2014. The company is based in

Bangalore, Karnatakaas Bundl Technologies Pvt Ltd. The company runs each delivery on its own, with an

2015-16sem1

Company Experience Year

indigenous delivery fleet, thereby minimising dependence on the already burdened restaurant systems. The delivery fleet consists of both full time employees and part-timers, who are allowed to make as many deliveries as they want, with no fixed targets, and are paid accordingly. Recently, Swiggy introduced a feature that allowed for live-tracking of each order. So it's a Start- up so, lot of learning should be there. I learn lot of things from here, which helps me in my future. Here I got lot of opportunities to take care of new initiatives. Here I worked in Finance and Marketing Department. In each department I learn something new, new technology on the work. In marketing I specially worked on these: [ ] [ ] Trade Marketing Channel Marketing Sales The whole 51/2 month is quite interesting and lots of learning for me. I learn many things from a huge supportive staff, they helps a lot. In future for coming people I thing they can learn so many things from this start-up. This is a fast growing start-up. This PS Station help me out in my future because basically I work here according to my ile interest and to that they allotted me a project and I start worked on. Lot of new things I learn and worked during my whole PS. I surely gain a lot things from here it is definitely going to help in future. Good part of start-up is you have to initiatives and work and the friendly environment everyone is ready to help. I always work for the swiggy order promotions. As a team leader I have to work, I have to manage all things. Plans everything's selects the best restaurants in that city that creates basically it is trade marketing how we promote swiggy outside. Work for the major event i.e. Bacardi NH7 Weekender events for Delhi, Pune and Bangalore. Saksham Phul (2012A1PS519H) Discipline: Chemical Engineering I was allotted Swiggy (Bangalore) as PS -2 station. I was excited to work in a startup & diversify my spheres. Initially I was dip into communication channel & aim was to optimize channels to improve customer experience. I gain significant knowledge of communication channels & their impact on customer experience. Later, I moved into a new project under the head of recruitment at Swiggy. I took charge of new initiatives at Swiggy. I was given responsibility to micro-manage which stand unique project allotted to an intern at Swiggy. I learn to deal with people, deadlines & this managerial experience would stand vital weapon in my resume. I improved both verbal & written skills at my ps.Knowledge base also widen in the field of business & communication channels. I'm taking back significance experience of 5 and half months of managing. I learn some of the protocols incorporated at industry which will be useful for me in near future. Getting into industry was difficult as we have to be punctual & responsible. It ignited a sense of responsibility along with dedication. At last, i would be going back with some vital contact from Swiggy. Sneha Suman (2011B1A1798P) Discipline: Chemical Engineering During these five and a half months of Practice School,I worked with a number of departments ranging from Human Resources to Operations to Marketing. As a startup, Swiggy plans to broaden its horizon and reach out to a wider base of people. For this, they need define and establish their prominence on various social platforms. Also, in order to expand Swiggy, the company plans to recruit from top tier colleges. For this, they need to create awareness across various colleges and strategize processes for hiring. On this aspect, I studied other startup models and worked on innovating strategies best suited for the company. I worked on reconciliation of errors. Reconcilation involves studying the causes involved in errors that happen in billing and cash exchange. The project involves finding out a solution and develop a SOP to minimize the errors in Bangalore. Brainstorming and interacting with people from various teams was an important part of my project as I worked to create standard operating procedures for problems and processes in their inchoate stage. My knowledge about MS Excel was enhanced along with my people's skill and adapting to the dynamic environment of a start-up.

Bundl Technologies Private Limited (Swiggy), Bangalore 2016-17sem1

Experience Year Company 1. Project -1 🛮 🗘 🖪 Market Analysis of all the Trade Discounts that were live on Swiggy (Bangalore), during July and August. Found the share of profit generated by the installment of trade marketing collaterals at Swiggy's partner restaurants. Coordinated the entire process of deployment of Trade Marketing collaterals in 235 Restaurants in Bangalore and analyzed their Impact on customer creation. 2. Project -2 🛛 🗎 🖯 Created a business case for the methodology that we used to increase the overall Average Order values in Partner restaurants all over India. Worked on Qlikview to extract data and create a dashboard, to analyze the end results of the proposed hypothesis. Analysed the price parity of items in partner restaurants in SWIGGY'S Platform as opposed to other platforms and created a business case for it. Tools used (Development tools -H/w, S/w): A. Market Research and Analysis B. Concepts of Qlikview and business Analytics C. Study of Business Strategy and Expansion D. Concepts of Excel VBA. Objectives of the project: To increase the average order value of each order placed on Swiggy Platform at PAN India level. Outcomes of the project: AOV Project helped Swiggy to generate an increment of Rs.8 in overall AOV and Increase of Rs, 5 in 2016-**Bundl Technologies Private** Hyderabad and Rs. 3.75 in Bangalore. Major Learning Outcomes: Got to learn and code on business 17-Limited (Swiggy), Bangalore intelligence softwares like Qlickview which are based on SQL for data analytics, which I never used before. sem1 Many students from bits already in analytics team, so they helped me a lot throughout. Apart from that excel VBA for making macros was also needed, my mentors guided me enough. Making projection models was also new, but learned it eventually. Brief Description of working environment, expectations from the company: Got to interact and present my proposals to the leading managers of other companies as well. Right from the start, they place interns at important positions and guide them through it. Your proposed strategies if backed down with relevant data, are actually implemented and worked on. Really good place to learn if one wants to start his/her own startup. You are incharge of the projects you are working on and they give you flexibilty and freedom to implement in your own way. Faculty NAME: ANJANI SRIKANTH KOKA Comments: Expectations from industry: Project Areas: Marketing&Sales, Vendor Management, Operations, Analytics; Not much technical skills needed but advanced excel knowledge and strong soft skills are very much needed. Students will work on different projects during their PS II Student Designed a Go-To-Market strategy and launched a content enrichment project to collect data form over 20,000 restaurants for Swiggy. The data will be used to enhance the search and filtering mechanism on the app front and display additional exhaustive information about dishes to the customer. It is aimed at helping a customer make an informed buying decision. Tools used (Development tools - H/w, S/w): Excel. Objectives of the project: Help the customer make an informed buying decision. Display exhaustive data about food dishes on Swiggy. Reduce complains and escalations. Increase sales. Improve product outreach. 2017-**Bundl Technologies Private** Outcomes of the project: Yet to be determined. Brief Description of working environment, expectations 18-Limited (Swiggy), Bangalore from the company: The work environment is quite relaxed. The company executives are supportive and sem1 extend help wherever necessary. At the same time, they do not mouth feed you and encourage you to find solutions to problems on your own. You have a very high ownership on your project and are free to make recommendations with respect to the processes involved. They follow a pretty straight forward open door policy. Academic courses relevant to the project: Marketing Research (Probably? I dont know since I havent taken it. The project was a very MBA oriented project. Really liked working on it though). Analyze Swiggy's Trade Discount Properties to obtain key actionable insights. Tools used (Development tools - H/w, S/w): MS Excel Objectives of the project: Provide Insights Regarding Trade Discounts Outcomes 2017-**Bundl Technologies Private** of the project: Data Driven Enabling of Sales Team. Major Learning Outcomes: Analytics Practices Brief 18-Limited (Swiggy), Bangalore Description of working environment, expectations from the company: Casual but competitive, interns are sem1 given substantial responsibility and independence to carry out their work. Academic courses relevant to the project: Technical Report Writing

Experience Year Company Rain operation and analysis: 1) update daily/weekly/monthly rain reports. 2) The team's job was to work on experiments to reduce order loss in rain 3) Assist teams in design, rollout, tracking, impacts and scaling up experiments 4) Reporting and analysing traffic data 5) Lining up experiments on Pan India level 6) Analysing performance of swiggy across rain periods Tools used (Development tools - H/w, S/w): SQL-Qlikview, MS-Excel, Prestodb, MS-Office Objectives of the project: Prevent order loss during rains Outcomes of the project: Reduced order loss Developed consolidated set of learning for monsoon period Conceived, designed, roll out, scaleup of experiments Finding on ground and product level solutions and scale them Major Learning Outcomes: Learnings 1) the functioning of an online delivery system 2) Coping 2017-**Bundl Technologies Private** with high intensity work environment at a startup 3) Hard skills and soft skills required in a professional 18-Limited (Swiggy), Bangalore setup Brief Description of working environment, expectations from the company: The environment was sem1 very tough to cope with initially due to immediate expectation of results, so everything was an on the job learning, learn new software while working on code on the same to obtain results required by my manager was a challenge. Contrary to my expectation of an organized work requirement, there were simultaneously many projects ongoing that I had to learn to manage well. Clear Communication from the company is also expected but was haphazard and a tad ill managed. Office hours are stretched more often than not. Academic courses relevant to the project: Principle of Economics. Faculty Comments: Expectations from industry: Shorter Learning curve, Approach any problem statement in professional way, To try problem solving proactively. Student I got to work on various projects, the very first one being related to the most important component of their services: DEs. DE, short for Delivery Executive, is the guy who picks up the food from the restaurant and delivers it to the customer. So, he is the face of the company from the customer's point of view. In this project, I was supposed to devise strategies to fill in the shortage of DEs. So, I had to understand their thought process so as to maximize the DE fleet size for Chennai; and by exploring the various channels for sourcing them such as Job-based ad websites, placement agencies, consultancy services, etc. Hence, most of the work was data collection and management. I also got to work with the marketing strategies in these projects. Later on, I got to work on competitive analysis on the demand front, where I listed out all the restaurants tied up with us and our competitors. These lists would be very useful for the company in the future. Although most of the work was tiring and monotonous, I am satisfied with it as the work done will 2016-**Bundl Technologies Private** be very useful for the company. Tools used (Development tools - H/w, S/w): Microsoft Office Objectives of 17-Limited (Swiggy), Chennai the project: To fill in the shortage of DEs by sourcing them through various channels; Expand the client sem1 base of the company and improve services. Outcomes of the project: DE shortage problem was effectively solved and the company is working on expansion of their client base. Major Learning Outcomes: Management skills, some aspects related to Sales and Marketing, Communication skills Brief Description of working environment, expectations from the company: Being a start-up, the atmosphere here is very friendly. We were very involved in the improvement of their services, as the Chennai division was launched only a year ago (in November '15). Hence, there was a lot of scope for it. However, getting a project with a fixed and rigid objective is difficult as all the departments and teams have to go hand in hand. Do not expect a single project for all of the semester. You may be part of several smaller projects, under different teams, with one or two of these projects standing out as the better and bigger ones.

Company Experience Year

First, I chose the project titled Competitive Analysis of Marketing and Sales of Online Food Ordering Market Space in Chennai. The main objective was to strengthen the demand in catalogue by area, Cuisine & Restaurant popularity by the use of competitive intelligence. After completion of that project, I undertook the project of RFM (Recency, Frequency and Monetary) analysis with the objective of finding the most loyal customers from the huge customer base.Later, I worked on the analysis of Order Cancellations of Swiggy Chennai due to the reasons of change of mind by Customer and Closing of Restaurants during the operating hours. Tools used (Development tools - H/w, S/w): Excel 2016 Objectives of the project: i) To strengthen the demand in catalog, by Area, Cuisine & Restaurant popularity. ii) To find the most loyal customers from the huge customer base. iii.) To find the average time taken for the order cancellations due to the change of mind of customer and to find the pattern of the restaurants which are closing during the operating hours. Outcomes of the project: 1.) I have found out the leading and lagging items, cuisines, restaurants and areas through sales perspective all over the areas in Chennai which are on live on Swiggy. 2.) I have found out the most loyal customers of Swiggy as well as the customers who faced horrible experience from the services of Swiggy. 3.) I have found the average time taken for the order cancellations due to the change of mind of customer and even i have found the pattern of the restaurants which are closing during the operating hours. Major Learning Outcomes: 1.) I have learnt the concept of applying the competitive intelligence to find the solutions for the problems arises in the organization and to find the new ways to improve the organization position as a market's key player. 2.) I have learnt some of the most advanced features of Excel 2016 to cater the results for my projects. 3.) I have learnt the concept of RFM Analysis which is a powerful tool to find the customer behavior towards the organization. Brief Description of working environment, expectations from the company: When coming to the working atmosphere, it is a better place to showcase ones talent as an employee. With the help of friendly work culture, one can surely improve themselves and can attain efficient performance in job. HR team organizes various activities frequently to improve the team work. Even the Star team trophy made a platform for the entire team to build a healthy competition. Though most of my projects were done under the guidance of sales and marketing teams, I had some great time with even rest of the teams like Vendor Management team, Field Operations team, Sourcing and On-boarding team and Finance team. Everyone helped me to face the challenges that I have encountered during my internship. Especially my mentors, who monitored my progress in the word assigned every week and he made some valuable suggestions which enhanced my performance in pursuing the projects. The company has already taken my analysis into account and started to operate by using them. The company is becoming a notable player in the market space of online food

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Bundl Technologies Private Limited (Swiggy), Chennai

Bundl Technologies Private Limited (Swiggy), Gurgaon For the first 3 months I worked on Excel and VBA, after which they gave me a role in sales; I had to track the performance of sales manager of all the areas. Excel learning was very important as it helped me learn how to play with data, you have enormous amount of data and if you are able to extract the relevant information then it could be very useful for the company. In my role in sales I have to interact with many people which helped me in my personality development. It was an overall learning experience. Tools used (Development tools - H/w, S/w): MS excel,VBA. Objectives of the project: To increase the orders of the company, to increase the efficiency of a team. Outcomes of the project: Increase in growth rate of the company. Major Learning Outcomes: You will learn to play with data and see how useful it is for a company to extract information from raw data. Brief Description of working environment, expectations from the company: My 5.5 months spent at Swiggy was a very good learning experience. I can say this as my transition from academic life to corporate life. We all have plenty of time in our college but as you move in a fast paced startup like Swiggy, you have to do your work within a specified time. Sometimes time given for a project is so less that you don't even have the time to take a breath. In the starting months I was struggling with Excel, but in a startup like this city head sits beside you, no separate cabins nothing, here you get the knowledge of the entire company.

ordering. Till now Swiggy employed itself in creating a brand value and from now on, it changed its

strategy to make an impact on the market. Student

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Company Experience Year

With some major competition in the online food delivery sector, a competitor analysis was essential. My first project involved analyzing the restaurants on the competitors platforms and setting priorities for all restaurants based on their ratings and votes. My second project was on Swiggy Select, a pilot initiative in Delhi NCR offering a 40% cashback in case of delay in delivery. A select set of restaurants were chosen based on their metrics. The project involved liaising with the Sales, Vendor Management, Operations and the central team in Bangalore. By collaborating with the operations team, I also worked on developing an Extra SLA(Service Level Agreement) Model. With inputs being the number of orders and the number of delivery executives available at point of time, banner factors were set based on which beef ups were added to the predicted SLA. Tools used (Development tools - H/w, S/w): The aforementioned work required a high proficiency in MS Excel. Through the course of the project, I also got an exposure to VBA. Objectives of the project: The aim of the project was to create a consolidated list of restaurants in the existing areas as well as new areas for onboarding new restaurants onto the platform based on the set priorities. Swiggy Select intends on creating a niche set of restaurants which offer low SLA thereby offering a better customer service. Extra SLA model was created to determine start and stop banner factors for all zones depending on the time of the day for optimizing the difference between the predicted and the actual SLA without hampering the compliance and increasing it if possible. Outcomes of the project: The set of restaurants thus determined were used in shaping the Quality of Supply in existing areas and launching new zones in Ghaziabad and Noida. Swiggy Select has ensured an increase in the city level automation of acceptance of orders, decrease in edits and cancellations, reduction in average preparation time and increase in overall compliance. By analyzing the customer cohorts, it was also observed that the number of new users acquired by the restaurants on select was more compared to a

non-Select restaurant and thus the restaurants saw an average 15% growth in orders. The extra SLA model ensured a reduction in the difference between predicted and actual SLA. Major Learning Outcomes: 1. Competitor analysis for improving quality of supply. 2. Understanding customer cohorts and planning marketing initiatives based on it for attracting new customers and increasing retention and order

frequency of the existing customer base. Brief Description of working environment, expectations from the

interacting with the higher officials on a day-to-day basis and working with them, one can understand the thinking that goes behind various activities conducted by e-commerce portals. The teams are well knit

company: Swiggy, being a start-up, has a brilliant scope for learning and executing new ideas. By

making liaising with them easy. Student

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Bundl Technologies Private Limited (Swiggy), Gurgaon

**Bundl Technologies Private** 

Limited (Swiggy), Hyderabad

My project was to reduce item edits and increase item acceptance. I got a list of top defaulters and then I talked to restaurant managers . I explained the new feature of our vendor application using which they could mark any item out of stock for some time frame. After I was done with my calling I started to analyze any change in their performance. My second project was with field operations on order cancellation. This was a very interesting project for me as it was a very important project for the company. The company was losing a major part of their revenue due to order cancellation. The company had to pay restaurants for orders that got cancelled after the food was prepared. My job was to analyze the data for entire October month and provide a solution for reducing order cancellation. Other than this I was able to understand how the complex process of delivery is well managed during peak hours of business, bad weather, customer dissatisfaction. Tools used (Development tools - H/w, S/w): MS Excel , MySQL , communication skills Objectives of the project: Reducing item edits, loss due to item cancellation and increasing order acceptance. Outcomes of the project: Reduction in edits, increased acceptance(outcome of my second project is yet to come). Major Learning Outcomes: MS excel Brief Description of working environment,

expectations from the company: This company has a very flexible working culture. It allows employees to

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work from home in many cases. HR activities are really good. Student

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy), Kolkata	During my time in Swiggy Kolkata I have sequentially worked on multiple work-streams, each giving a lot more ownership and learning than the previous one. I started off the semester by helping then in onboarding of restaurants. Over the period of the next five months, I took complete ownership of cake delivery process which is new delivery process in the system. My biggest achievement in this internship is starting cake deliveries with modified cake delivery system and introducing hybrid packaging system for the cakes. In addition to the above, this experience has taught me to work and manage a team in a professional manner. Tools used (Development tools - H/w, S/w): Qlikview, Excel Objectives of the project: To analyze the restaurant metrics and initiation of cake delivery in Kolkata. Outcomes of the project: Cake delivery is successfully started in Kolkata with 1000 cakes delivered so far. Major Learning Outcomes: I have learnt to deal with stressful situations in a calm and collected manner as I was in vendor management team and on-ground operations coupled with the experience of large data management gave me an invaluable insight into the nuts and bolts of the food delivery business. Successfully managing the competing interests of multiple stakeholders while being steadfastly focused on the core company goals has been the most important takeaway from this experience. I learned good email communication, following up on work items pending with other teams, pro-active communication and presentation skills and verbal discussions. Brief Description of working environment, expectations from the company: The experience of being a part of startup like Swiggy has been quite a fulfilling one. It has given me a great deal of insight into how sustainable companies are built brick by brick. Moreover, the very range of exposure; from City head to delivery boys has given me the ability to think from a macro to micro perspective which I believe which go a long way in the professional life ahead. Student	2016- 17- sem1
Bundl Technologies Private Limited (Swiggy), Mumbai	My work here in Swiggy Mumbai was basically as a Business Analyst. Swiggy Mumbai is pretty new and still in its developing state. There are various different departments here and as an Intern I was attached to two departments namely Vendor Management and Business Operations. In Vendor management, work basically included meeting the Vendors which generally are the Restaurant owner or Managers. So this work basically requires communication and negotiation skills. In Business Operation, the main work keeps on revolving around Data Analysis and I have to make consolidated reports of the previous weeks and set the targets to achieve for the upcoming week. The work culture is pretty good and people here are friendly and easy to work with. Tools used (Development tools - H/w, S/w): MS Office, MS Excel, SQL Objectives of the project: To increase the compliance percentage and set the targets to be achieved for the upcoming week. Outcomes of the project: Compliance percentages were increased from 80% to 90% during my tenure. Major Learning Outcomes: I learnt how to communicate with people more effectively and how to negotiate the deals in real world. As of software's, I learnt advanced Excel and SQL. Brief Description of working environment, expectations from the company: Work environment is pretty cool and all the people are young here so the energy level of the office is tremendous. There is no dress code. We just need to focus on our work rest all is taken care off.	2016- 17- sem1
Bundl Technologies Private Limited (Swiggy), Mumbai	1. Project -1 [ ] Increased customer acquisition and order count Working end-to- end on a new initiative of venturing into tiffin services delivery across the city Analyzed area wise business growth reports and increased business areas wise 2. Project -2 [ ] Increased the Order acceptance and edit rate Increased the overall automation Rate and reduced restaurant cancellations. [ ] Worked on addition/removal of holiday slots, Restaurant on-boarding details and scheduling of photoshoots Tools used (Development tools - H/w, S/w): MS Excel, SQL, Qlikview Objectives of the project: Analyzing business opportunities and driving company growth by undertaking new initiatives. Outcomes of the project: To drive business initiatives from customer and vendor side. Major Learning Outcomes: Improvement in the productivity and efficiency of the product & services Brief Description of working environment, expectations from the company: Work Environment is pretty cool and all the people are young here so the energy level of the office is tremendous. There is no dress code. We just need to focus on our work rest all is taken care of. Student	2016- 17- sem1
Bundl Technologies Private Limited (Swiggy), Pune	Swiggy is an Indian online food ordering and delivery platform founded by Sriharsha Majety, Nandan Reddy and Rahul Jaimini in August 2014. The company is based in Bangalore. Coming to the project, I worked in two departments, sales and operations where i have learned communication skills and data analysis. My project in sales: competitor discount analysis, competitor bench-marking analysis, acquisition of few restaurants, I worked on reconciliation of errors. Reconciliation involves studying the causes involved in errors that happen in billing and cash exchange. Operations: worked on classifying delays, compliance and breach intervals, organized data into presentable manner. Tools used (Development tools - H/w, S/w): EXCEL Objectives of the project: To provide Swiggy services throughout the Pune Outcomes of the project: Improvement in the productivity and efficiency of the Swiggy services. Major Learning Outcomes: Excel, Communication skills Brief Description of working environment, expectations from the company: The whole 51/2 month is quite interesting and I have learnt a lot of things from the people over here, they helped a lot. In future for upcoming students, I think they can learn so many things from this fastest growing start-up.	2016- 17- sem1

Company	Experience	Year
Bundl Technologies Private Limited (Swiggy), Pune	Vendor Relationship Management monitoring restaurant health indices and restaurant performance indices. Development of business analytics tools to assist the business development team. Tools used (Development tools - H/w, S/w): Excel, VBA, Freshdesk, CMS, Qlikview Objectives of the project: To improve Acceptance, Automation Rates and cut down restaurant edits and cancellations. Outcomes of the project: Acceptance Rate increased by 8%, Automation Rate increased by 4% achieving quarterly targets. Major Learning Outcomes: Vendor Relationship Management, Data Analytics Brief Description of working environment, expectations from the company: The Working environment is perhaps the best one can find elsewhere. Every staff member is very cooperative and will go to heights to help you learn more. Mentor NAME: PRANAV VERMA Designation: Founder & CEO The company is mainly into developing a product of its own using machine learning algorithm implemented using Phython. Although all the interns were new to the technology, still they picked it up quickly. The BITS interns are dedicated and have an out-of-the-box thinking. Student	2016- 17- sem1
Busigence , Gurgaon	My work at Busigence Technologies is focused on developing novel techniques on data science. My role is that of a research and implementation intern, where I conduct research on the existing techniques on machine learning, algorithm optimization, statistics, & exploratory data analysis and develop modern & innovative techniques compared to merely adopting the traditional ones. I am currently working with the data science team on solving complex scenarios through statistical exploration & machine learning. I have gained practical knowledge on statistics, algorithms (classifiers, clustering, regression, bayesian, decision trees, random forest, neural networks) and hyperparemeter optimization using various search algorithms on large data sets both supervised and unsupervised. I have also worked on feature selection. I shall be covering business acumen while working on analytics on real-world scenarios. Tools used (Development tools - H/w, S/w): Python, Apache Spark Objectives of the project: To code various steps of Data Science Outcomes of the project: Various data science techniques Major Learning Outcomes: Obtained knowledge and experience of that of an advanced data scientist. Brief Description of working environment, expectations from the company:Company is located in an ideal location in Gurgaon and the working conditions are quite good. Hours are long, but the learning covers for that. The company expects you to research and implement very advanced data science techniques in python.	2016- 17- sem1
Busigence , Gurgaon	I created a model that helps in optimizing hiring activities in an organization. To conduct this task first 2 months I was engaged in gathering information and completing research on why traditional hiring hampers the intake of quality candidates in an organization. We came up with very good strategies and then we finally reevaluated and submitted the final scenarios that helps in optimizing hiring activities. Tools used (Development tools - H/w, S/w): Machine learning, Objectives of the project: To optimize traditional hiring practices Outcomes of the project: Scenarios were created which helped in solving those problems Major Learning Outcomes: Major learnings were: 1. Data is so large that insights are very much required. 2. Traditional hiring does not match the right candidate to organizations. 3. Traditional hiring is outcome based hiring. 4. To optimize any problem, we need to use machine learning Brief Description of working environment, expectations from the company:Working environment was good. It was very competitive and everyday was challenging. There was no single day where we felt that today we are not supposed to do anything. Every day there was new start and new activities for us. Company people were very coordinating; they helped us with every single problem of any intern over there.	2016- 17- sem1

Experience Year Company During my stay at Busigence, I have been exposed to the world of Data Science, Machine Learning and a part of Artificial Intelligence. I implemented several algorithms like Logistic regression, Deep Belief Networks, Neural Networks and Clustering algorithms from scratch using python and its relevant libraries like Numpy, Pandas, sklearn, etc. I also worked on hyperparameter optimization and doing deep research regarding problems like class imbalance and how to solve this problem. Tools used (Development tools -H/w, S/w): I used Python, libraries like sklearn, tensor flow, theano, etc were also used extensively. Apart from that, I used Eclipse IDE for python, scala and spark. Objectives of the project: This project was aimed at gaining a deeper insight into data science and machine learning using python as a tool. After testing and implementing a lot of algorithms both supervised and unsupervised, it was pretty clear how different algorithms work, their shortcomings and how to improve upon a few of them to get better accuracy. Also, we got a better and deeper knowledge of several machine learning paradigms and its intermingling nature with data science. Also, we attained a lot of knowledge about statistics and its high level of usage in Data Science. Outcomes of the project: This project was aimed at gaining a deeper insight into data science and 2016-Busigence, Gurgaon machine learning using python as a tool. After testing and implementing a lot of algorithms both 17supervised and unsupervised, it was pretty clear how different algorithms work, their shortcomings and sem1 how to improve upon a few of them to get better accuracy. Also, we got a better and deeper knowledge of several machine learning paradigms and its intermingling nature with data science. Also, we attained a lot of knowledge about statistics and its high level of usage in Data Science. Major Learning Outcomes: Knowledge about Machine Learning basics, steps involved, and several algorithms ranging from Supervised , Unsupervised till Reinforcement learning paradigm associated algorithms. Also, we were exposed to python, functional programming paradigm, scala and spark. Brief Description of working environment, expectations from the company:The company expects its aspirants to have a good knowledge of statistics, coding in Python and Machine leaning. The working environment is suitable for people aspiring to really learn loads of important and essential things and work on real world projects. Mentor NAME: SHASHANK BHUSHAN Designation: Scientist C Excellent grip on the research area. Always ready to help. Faculty NAME: PRADHEEP KUMAR K Comments: Expectations from industry: Students are expected to have fair knowledge in embedded systems, robotics, VLSI projects, MATLAB and Labview Student My work at Busigence Technologies was focused on developing novel techniques on data science. The role was that of a research and implementation intern, to conduct research on the existing techniques on machine learning, algorithm optimization, statistics, & exploratory data analysis and develop modern & innovative techniques compared to merely adopting the traditional ones. I worked with the data science team on solving complex scenarios through statistical exploration & machine learning. I have gained practical knowledge on statistics, algorithms (classifiers, clustering, regression, bayesian, decision trees, random forest, neural networks) and hyperparameter optimization using various search algorithms on 2016large data sets both supervised and unsupervised. I have also worked on feature selection. I have also 17-Busigence, Gurgaon attained business acumen while working on analytics on real-world scenarios. Tools used (Development sem1 tools - H/w, S/w): Python, Apache Spark Objectives of the project: To code various steps of Data Science Outcomes of the project: Various data science techniques Major Learning Outcomes: Obtained knowledge and experience of that of an advanced data scientist. Brief Description of working environment, expectations from the company: Company is located at an ideal location in Gurgaon and the working conditions are quite good. Hours are long, but the learning covers for that. The company expects you to research and implement very advanced data science techniques in python. I created a model that helps in optimizing hiring activities in an organization. To complete this task, for the first 2 months I was engaged in gathering information and doing research on why traditional hiring hampers the intake of quality candidates in an organization. When the research was done, we tried implementing it to find out the best way to solve the problem. We came up with very good strategies and then we finally reevaluated and submitted the final scenarios that help in optimizing hiring activities. Tools 2016used (Development tools - H/w, S/w): Machine learning, Objectives of the project: To optimize traditional Busigence, Gurgaon 17hiring practices Outcomes of the project: Scenarios were created which helped in solving those problems sem1 Major Learning Outcomes: Learnt how to optimize any problem using machine learning Brief Description of working environment, expectations from the company: Working environment was good. It was very competitive and every day was challenging. There was not a single day when we felt that today we are not supposed to do anything. Every day there were new activities for us. Company people were very cooperative; they helped with every single problem of any intern over there.

Company	Experience	Year
Busigence, Gurgaon	During my stay at Busigence, I have been exposed to the world of Data Science, Machine Learning and a part of Artificial Intelligence. I implemented several algorithms like Logistic regression, Deep Belief Networks, Neural Networks and Clustering algorithms from scratch using python and its relevant libraries like Numpy, Pandas, sklearn, etc. I also worked on hyperparameter optimization and did deep research on problems like class imbalance and how to solve the problem. Tools used (Development tools - H/w, S/w): I used Python and libraries like sklearn, tensor flow, theano, etc were also used extensively. Apart from that, I used Eclipse IDE for python, scala and spark. Objectives of the project: This project was aimed at gaining a deeper insight into data science and machine learning using python as a tool. Outcomes of the project:. After testing and implementing a lot of algorithms both supervised and unsupervised, ways were devised to improve upon a few of them to get better accuracy. Major Learning Outcomes: Knowledge about Machine Learning basics, steps involved, and several algorithms ranging from Supervised, Unsupervised till Reinforcement learning paradigm associated algorithms. Also, we were exposed to python, functional programming paradigm, scala and spark. Brief Description of working environment, expectations from the company: The Company expects its aspirants to have a good knowledge of statistics, coding in Python and Machine leaning. The working environment is suitable for people aspiring to really learn loads of important and essential things in the field of Data Science and their implementation on real world projects. Mentor Designation: Scientist C Excellent grip on the research area. Always ready to help. Faculty Comments: Expectations from industry: Students are expected to have fair knowledge in embedded systems, robotics, VLSI projects, MATLAB and Labview Student	2016- 17- sem1
CA Technologies, Bangalore	Mainly understanding one of their products- what it does and how. And deploying that particular product in different kind of production environments such as docker, kubernetes, etc. Tools used (Development tools - H/w, S/w): Docker, Kubernetes, Json Objectives of the project: Deploy the product in Kubernetes environment Outcomes of the project: Clients favouring Kubernetes environment could deploy this product using the scripts i have written during the ps. Major Learning Outcomes: Teamwork, Working of Software industry(atleast to some extent), Getting to know about latest technologies(like docker,kubernetes). Brief Description of working environment, expectations from the company: Very good environment for one to grow and learn about something. Staff is highly supportive and always encourage you to come to them regarding professional or personal issues. Academic courses relevant to the project: Computer Networking, OOPs, C, OS	2017- 18- sem1
CA Technologies, Bangalore	Validation/Automation of Alerting & Monitoring System for Online Payments system, development of a springboot application which includes new features to be integrated into the product. New features like a login and signup page for the application, querying the database to check for duplicates and edge cases, a better UI for updating the configuration values, etc Objectives of the project: Software development Outcomes of the project: new functionality added to the product Major Learning Outcomes: Backend Development in JAVA using spring framework Brief Description of working environment, expectations from the company: Working environment was good, company provides all resources required for learning as well. Academic courses relevant to the project: OOP- Object Oriented Programming	2017- 18- sem1
CA Technologies, Bangalore	Finished the complete validation of an Alerting and Monitoring System for online Payments and delivered it for production. Wrote unittest test cases in python as a part of the Automation framework for the Monitoring System. Worked on a Data Analytics project involving the use of Apache Flume to consolidate logs collected from multiple servers and sent to write in a Kafka Bus. Tools used (Development tools - H/w, S/w): Oracle SQL, Linux, Apache Flume Objectives of the project: Validation of an Alerting and Monitoring System. Outcomes of the project: Validation Major Learning Outcomes: Competency in SQL, Linux. Brief Description of working environment, expectations from the company: Flexible timings, decent working environment. Academic courses relevant to the project: OOP, DBMS	2017- 18- sem1
CA Technologies, Bangalore	In one project we built a search engine with features like autocomplete, search history based suggestions, multi-lingual and misspelled-word interpretation. In another project, we built a Chatbot. Tools used (Development tools - H/w, S/w): ElasticSearch, AngularJS, Kibana, Java, DialogFlow, Rasa Objectives of the project: To build a Search Engine POC and Chatbot Outcomes of the project: Done a Search Engine POC and research and little development in Chatbot project. Major Learning Outcomes: Got introduced to Elastic Search, NLP, Chatbot, AngularJS and enhancement in knowledge of Java, Javascript, API. Brief Description of working environment, expectations from the company: Company expects basic knowledge of programming, javascript is highly preferred, especially AngularJS or Angular. Besides, the company uses Java, so a basic knowledge of Java is also required to perform well. The working environment is very good and professional. Mentors are resourceful and managers are very helpful. Academic courses relevant to the project: Object Oriented Programming, Machine Learning.	2017- 18- sem1

Company	Experience	Year
CA Technologies, Bangalore	Did two project 1) PoC on Smart Search based on Elasticsearch and Angular js a data retrival model with some advanced features of autocomplete, multilanguage support, search history support and auto correction.2) ChatBot using an on premise conversation engine and designing the dialogue manager and implementing the business logic and training the model, automating the testing and updating the model. Tools used (Development tools - H/w, S/w): JAVA, Angular js, Elasticsearch, Machine Learning, NLP Objectives of the project: Smart-Search and Virtual Analyst Outcomes of the project: implemented both the ideas and working models. Major Learning Outcomes: New Technologies, Team-work, Corporate life. Brief Description of working environment, expectations from the company: No work stress, friendly mentors and mangers and a healthy working environment. Time is given to study about the new project and helpful staff and lot of inter teams interaction which adds to the learning experience. Academic courses relevant to the project: Data Mining, Infromation Retrival, Machine Learning, Artificial Intelligence, OOP Student	2017- 18- sem1
Capillary Technologies	Web Development on .NET platform. Developed two factor authentications, PCI DSS related features which included password policies, creation of user profile page, feature addition of reset password via link sent to email, manual password change after login in Control Panel of eCommerce platform of Capillary Technologies. I was also involved in live team work. Tool used (Development tools - H/w, S/w): .NET 4.5, .NET CORE 2.0, mysql, toad, postman, Objectives of the project: PCI-DSS compliance Major Learning Outcomes: Web development, database management, API, IIS Brief Description of working environment, expectations from the company: It is important that before starting to work here at Capillary Technologies, a minimum knowledge of data structures is a must as the interns will otherwise have to google everything and not move forward as the company expects us to. Students must be able to handle pressure. Academic courses relevant to the project: Data structures, Database Management Systems Student Name: Aayush Agarwal (20150228)	2018- 19- sem1
Capillary Technologies - Testing Automation , Bangalore	As a part of the campaigns team, the work mainly revolves around setting up and handling the work of the campaigns for its customers. I have been given the responsibility to take care of their email validation service, which is a crucial step of the team. The situation as of now, was that their were certain issues regarding the email validation and which in turn started affecting the customers. Hence, there was a need to take certain suitable measures to make this as accurate as possible. The service follows a queue system of a definite batch size. After the analyses of the logs and the database, the problems were found out and the necessary code changes and add-ons were suggested so as to improve the accuracy of the service such as delaying a process for some time so that maximum retry of the service does not create a problem, handling blacklisted domains and so on. A function was to be implemented for just showing the stating the final status of the email without displaying other indicators involved. In addition to the above project, I was given another project to work on in, wherein the objective of the project was to write a script so as to extract the data pertaining to the usage of product in terms of certain metrics. This project was started so as to help the product managers to draw enough insights from the product usage in different areas and take necessary actions to overcome nay difficulties. The data-source in these cases were MySQL and MongoDB. A python script was written which incorporated the required MySQL/Mongo queries and the necessary connections with the production and testing servers. The generated results were presented in the form of an excel sheet. Some of the KPIs were number of messages, number of campaigns and so on. Tool used (Development tools - H/w, S/w): Java,Python,MongoDB, MySQL, GitHub Objectives of the project: 1) Improving the accuracy and correctness of email whitelisting service. 2) Automation of product usage span scoring system Major Learning Outcomes: 1) Writing optimise	2019- 20- sem1

Experience Year Company Enhancement of control panel in Anywhere Commerce Plus, e commerce platform built by Capillary. Client side and Server side design of web pages. Tool used (Development tools - H/w, S/w): VB.NET, ASP.NET, MySQL, Javascript, PHP Objectives of the project: Enhancement of an existing product Major Learning Outcomes: Database, MySQL, client side and server side web page design. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Relaxed environment, flexible Capillary Technologies work hours but company expects you to finish work on time Academic courses relevant to the project: 2019-Testing Automation, Object Oriented Programming, DBMS, DSA Brief write-up on PS-II station: CEERI, Pilani is a core 20-Bangalore electronics engineering research institute, that provides opportunities to students to work on live research sem1 projects in various domains of electronics engineering. A number of projects in the areas of deep learning, machine learning and IoT are available. Students need to have basic understanding of algorithms, programming languages like Python, data analytics and cloud computing, though the required study material is furnished by the mentors. Opportunities to go for MTech and PhD, JRF are also available. Students should have a good idea of the concepts that the company expects us to know before we come here. However we did have a good help from the mentors here at the company. so we were able to learn the concepts and start working on the application development. Knowledge Required: Objective - C, XCode, Git and some concepts in iOS application development. The significance of these concepts is it helps in understanding how the app development in iOS works. Also these concepts help in creating and development of apps. PS-2 experience helped in transforming the academic knowledge I gained in college to implement in the company work. It helped in developing the skill set required to perform in industry. This 51/2 month experience has been helpful in acquiring knowledge in application development in iOS which I had no clue before coming here. This experience helped me in learning how to be a part of team and how to share and complete our tasks as expected on time. I learned how the company works and how the various teams in the company function with a sole target in mind, but with various tasks the teams are expected to complete. The cooperation the teams in the company have is amazing and that's what is important for the successful run of the company. I learned the concepts regarding iOS app development and how a company like Carwale works. I also learned some other important concepts like Git, OOP, Objective - C as part of my PS-2. How will the PS experience augment your future career prospects? I think my PS experience will help in laying the foundation for my future in app development and also made me open to pursue my career in IT industry. Saumya Jain (2012A1PS426P) Discipline: Chemical Engineering 2015-Carwale (Automotive Switching to a new industry in a short span of 1 month Learnt the world of Computer science and Mobile 16-Exchange Pvt.Ltd), Mumbai application development. Coming from non CS background, I knew nothing about Mobile App sem1 Development. My PS-2 company Carwale needed software engineers only, and hence was asked to do work on Software development. I started with OOP and completed the course in less than 1 month (covered during one full semester in college). Well the studying didn't end here. I started with Objective Ca new Mobile application development language (10% C, 20% OOPs, 70% Objective C concepts). It took 1 more month to complete and learn about it. After 2 months I had no knowledge what I will be doing exactly, but things turned. My first feature for app went live by September. After that it was like a sea wind. Sometimes easy and sometimes harsh. I worked on a total 4 live features in 3 1/2 months after my learning period. And some of them are live, while some will be live by December end. After the unprecedented opportunity of the computer science world, I am kind of confident about making an application on iOS platform and entering the world of computing. Well, I got my answers to how a Startup works, how backend of any App works, and how is data being circulated in cloud computing. I got to know how WhatsApp works from one live feature I worked on. As basic programming is required in each and every field, this PS2 gave me a head start for my future aspects of career. It also prepared me for another ile which was missing from my resume, and I was craving for that sector to be there. Knowing a startup. Increasing contacts from one university to various universities of India. Improving human interaction capability. Preparing myself for a LIVE PROJECT and work culture of corporate sector. I think these powerful achievements do conclude my really turbulent journey in a streamlined one.

Company	Experience	Year
Center for AI and Robotics, Bangalore	My work was to recreate my mentor, Dr S. Sahoo's , published papers on Vehicle dynamics, particularly the in the field of Design and Implementation of Heading and Steering Angle Controller for an Unmanned Ground Vehicle. There were about 5 papers that were all related to each other and more advanced than the one published before. The simulation was firstly done on MATLAB Simulink. But since the 6th and the latest paper involved step moter controller which cannot be implemented on simulink I then implemented all the papers as a MATLAB code. This project is mostly for post graduates as it requires at least one year of work to be done on it for a more practical experience. Mine was more of a Theoretical and Simulation based experience. Tool used (Development tools - H/w, S/w): MATLAB, Simulink, CarSim, CarMaker Objectives of the project: Recreation of the papers for the purpose of understanding various outcomes for various instances involved in navigation of an Unmanned Ground Vehicle Major Learning Outcomes: Detailed and In depth knowledge of Vehicle Dynamics with hands on experience in simulation and Paper Publication. Details of Papers/patents: Dr S.Sahoo 2012, 2014, 2015, 2016 and 2018 IEEE, ASME Brief Description of working environment, expectations from the company: Environment was that of a proper secretive Govt organisation. No internet access, no mobile phones or pen drives of any sort. Timings were 9-3.30 mon-fri. Stipend of Rs 12000/p.m is only given to Students with CGPA> 7. You are expected to complete the goals in the given timeframe with limited resources. The library is good. The scientists there are helpful but devoid of time. My PS instructor, Raghurama sir was the best part of this PS experience, he is your friend in every way possible. Extremely helpful and understanding. My advice: If you want a PS to not take much of your time and you are fine with not having a stipend or your CGPA doesn't give you a good statiom but want to be in Bangalore then CAIR is for you. Academic courses relevant to t	2018- 19- sem1
Central Leather Research Institute	Fabrication of keratin composite three dimensional scaffolds for soft tissue engineering purposes with biomedical applications. The scaffold could possibly promote healing in chronic wounds and help with conditions such as diabetic foot ulcer. Tool used (Development tools - H/w, S/w): HPLC, SDS-PAGE, UV-Visible Spectroscopy, CD Spectroscopy Objectives of the project: To fabricate a keratin and silk fibroin composite scaffold and incorporate a pharmacologically active compound to promote wound healing. Major Learning Outcomes: Analytical processes. Academic courses relevant to the project: Instrumental methods of Analysis, Biological Chemistry. Student Name: pranav modale (2015A1PS0733G)	2018- 19- sem1
Central Leather Research Institute (CLRI) , Chennai	Worked on the film forming ability of Carrageenan and gelatin complexes. Tool used (Development tools - H/w, S/w): UV spectroscopy, Texture profile analyser, extraction of collagen protein Objectives of the project: Film forming ability. Major Learning Outcomes: Piqued interest in learning more about protein extraction, and proteiaceous complexes. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Biochemical Engineering Student	2019- 20- sem1
Central Leather Research Institute (CLRI), Chennai	The approach employed towards obtaining the final result was done in two parts. The first stage involved the prediction of biomass concentration in the reactor with the heat flux values as input. Once this model was valid, a suitable model too link biomass and product concentration was chosen (Luedeking-Piret Model). The theoretical values of biomass were then used to predict the product concentration. Tools used (Development tools - H/w, S/w): OriginLab(data analysis software), UV Spectrophotometer, Bioreaction Calorimeter, Centrifuge; Objectives of the project: To establish a model that would allow us to predict instantaneous product concentration in the reactor, using heat flux as an input. Outcomes of the project: A suitable model to predict product concentration from heat flux values was developed. There were some intervals of the experiment where model showed some deviation from the actual values and further work is required to make it more accurate. Major Learning Outcomes: During the course of the project, I learned various assay techniques to determine concentrations. I gained insight into the mechanism of bio polymer formation in microorganisms and the conditions at which they occur. I also learned the approach to model experimental data. Brief Description of working environment, expectations from the company: The Institute provides a good work environment throughout the course of the project. They provide valuable feedback and assistance with the project. I got to work with tools such as Bioreactors, which are important components in the industry. There is also significant experimental exposure during the project. Most of the projects here are based upon problems encountered Industrially and hence are very important. The Institute therefore, expect significant progress in the work that you do. Academic courses relevant to the project: Some of the concepts learned in Numerical Methods for Engineers (Chemical Engineering CDC) like data fitting, regression etc. were used in the project. These were usefu	2017- 18- sem1

Company	Experience	Year
Central Leather Research Institute (CLRI), Chennai	cellulose is extracted from agricultural wastes and the product is applied in leather finishing to overcome the grain defects in the leather. Tools used (Development tools - H/w, S/w): Origin, MS Office Objectives of the project: production of valuable product from agricultural waste and successful application in prominent industrial sector Outcomes of the project: cellulose can be used in leather industry with its derivatives Major Learning Outcomes: How leather is manufactured. How to work in Research and Development sector. Brief Description of working environment, expectations from the company: CSIR-CLRI gives a friendly environment to work. The progress is constantly checked by the mentors. As the institute is related to leather sector any project will be related in any way with leather. Academic courses relevant to the project: Seperation process-1, seperation preocess-2 Student	2017- 18- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Calculation of accuracy and precision of multiple object trackers using CLEAR MOT Statistics Tools used (Development tools - H/w, S/w): OpenCV, QtCreator, NVIDIA's Jetson, C++ Objectives of the project: Calculation of accuracy and precision of multiple object trackers using CLEAR MOT Statistics Outcomes of the project: Successfully debugged and tested a number of object trackers, while adding on a few blocks of code to it, and learned the algorithms involved: Including MCMO, Adaptive MOT, GMM, TLD, MeanShift, CAMShift, Canny Edge Detection, Image Subtraction Major Learning Outcomes: Learnt C++, OpenCV, worked on Qt creator, wrote/added on to, debugged and tested multiple object trackers, and learnt about various algorithms including TLD, GMM, Image Subtraction and Canny Edge Detection. Brief Description of working environment, expectations from the company:The working environment was far less than ideal. I witnessed multiple instances of highly unprofessional behaviour, that stopped me from feeling comfortable in the environment I work in, but more than that, it stopped me (and others) from giving the best we could, as professionals. Some such instances were also reported to PSD, and I truly applaud how maturely and gracefully they taught me to handle it. They were really helpful. However, I would strongly suggest against keeping CAIR as a PS2 centre in the future. I was quite disappointed, and did not expect a PS2 work environment for BITS Pilani students to be so colossally unprofessional. In case you are unable to remove this as a PS station, do try to ensure mentors with reasonable and professional attitude for all. Professional ethics standards should be the same for everyone in the workplace. Lastly, since all this was excluding the economic problems, I must add that stipend is essential in a city like Bangalore. We got Rs O/for the whole July to December period, which included having to endure so much unnecessary havoc and coercion. And even though we ended up learning something, I don't see why we could	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	We basically worked on the theory of vehicle dynamics and the first few days involved its theory, then we worked on devloping pid heading angle controllers which was based in matlab, we estimated the cornering stiffness using vehicle parameters, we had to design tue transfer function for our controller. Tools used (Development tools - H/w, S/w): Matlab Objectives of the project: Designing harding angle controllers for autonomous ground vehicles Outcomes of the project: We designed pid controllers for agvs, devloped the sterring actuator model for the vehicle we simulated all the results and compared them to the experimental ones. Major Learning Outcomes: Vehicle sensitivity analyses, Cornering stiffness estimation, Designing linear/non linear controllers. Brief Description of working environment, expectations from the company:The environment is pretty relaxed,there is a lot of work for people who are interested to work ,the scientists are very helpful there guidance was very crucial for us , lot of opportunities for people who are willing to work.	2016- 17- sem1

Company	Experience	Year
Centre for Artificial Intelligence & Robotics, Bangalore	Study of programming basics - DSA, fundamentals of autonomous robot navigation and SLAM techniques, In depth analysis of existing popular localization algorithms and modification of one such algorithm to include an extra variable of scale for each particle. Tools used (Development tools - H/w, S/w): C++, ROS, Custom made bots running ubuntu 14.04 Objectives of the project: For an autonomous robot employed in the field of search and rescue, localization can be left dependent on the availability of a detailed, accurate map of an area, as standard localization algorithms require a map in order to guess where it on it and use this informationfor further purposes such as path planning and exploration. This study aims to remove the need for a map, replacing it with a user input, semi-accurate map by modifying the existing AMCL algorithm in order to allow for minute inaccuracies. Outcomes of the project: A modified version of AMCL was built to cope with inaccuracies of scale and linearity in hand sketched maps. Though results were mixed, they can be improved upon by utilizing different versions of odometery, scanning and localization methods. Major Learning Outcomes: Programming fundamentals, fundamentals of autonomous robot navigation and localization Brief Description of working environment, expectations from the company:Working environment consists of a trainee room wherein all trainees have to be present most of the times, leading to a very unprofessional environment which is not conducive to either learn or work with full concentration. Internet facility is not officially provided but can be accessed through a separate internet room using some scientist's user credentials, but was mostly unused. Expectations may vary from scientist to scientist, but on average it is expected to stay in office for 6 hours, followed by additional research on work later on, since it's impossible to do so while at office.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	My work was related to robotics and computer vision. Objective was: given a goal to the robot, it should navigate to that point avoiding all the obstacles. It should also create a map of the environment while navigation. This problem is known as Simultaneous Localization and Mapping. Tools used (Development tools - H/w, S/w): ROS, CUDA Objectives of the project: SLAM Outcomes of the project: Map of the environment in the form of local and global costmaps, and path of the navigation process. Major Learning Outcomes: Robotics software development and debugging. Brief Description of working environment, expectations from the company:Working environment was good if you show interest in the field. Mentors have a good amount of practical experience who will help you if you ask them doubts. Some drawbacks are there is no internet inside the organization. Only one internet room is there which can be used by trainees. No mobile phones allowed. As it is a government organization, there are a lot of rules and regulations in the starting of the PS.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Simulating the motion of a snake robot using MATLAB Tools used (Development tools - H/w, S/w): MATLAB Objectives of the project: To map the path followed by the tail of a robot when the path constraints for the head of the snakebot are given Outcomes of the project: Successfully mapped the motion of the tail for a 12-link snakebot Major Learning Outcomes: MATLAB, Tractrix equation Brief Description of working environment, expectations from the company:Very poor working environment. Limited internet access made research work quite difficult. Scientists were usually busy, interaction was sparse. Computers given to us to work on were not up to the mark, very slow and old.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Calculation of precision and accuracy of multiple object trackers using CLEAR MOT statistics. Coding role initially, testing role later in which artificial intelligence is used to find objects and people in surveillance videos. Also deals with computer vision tasks. Tools used (Development tools - H/w, S/w): OpenCV, CPP, CLEAR MOT, not challenge 2016 benchmark Objectives of the project: To find the accuracy and efficiency of trackers coded by scientists at the centre and if possible make them more efficient. Outcomes of the project: Accuracy and precision found. Also multiple tasks completed in the fundamentals of computer vision and CPP for proficiency with tools. Major Learning Outcomes: Strong grasp of various computer vision concepts, coding in CPP. Also familiarity with artificial intelligence topics. Product in various tools like OpenCV. Brief Description of working environment, expectations from the company:Working environment was really good for research. Supportive mentor at CAIR, but he was busy during the last three weeks on assignment and hence the project slowed then. Good knowledge base of all mentors, very helpful, they want us to produce original research work. But a lot more improvement would have occurred if regular access to the internet was provided.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Simulated a heading angle controller for unmanned groung vehicles on SIMULINK. Objectives of the project: Simulated a heading angle controller for navigating the vehicle Outcomes of the project: Heading angle controller simulated and sensitivity analysis done. Major Learning Outcomes: Knowledge of control systems and vehicle dynamics. Brief Description of working environment, expectations from the company:Working environment not very conducive to learn. No internet facility and outdated systems and processors made available make research speed slow.	2016- 17- sem1

Experience Year Company Titled Snake Robot, the aim of my project was to simulate the locomotion of a hyper-redundant snake robot in MATLAB. The robot was modeled as a chain of rigid links connected by freely rotating joints. The motion of the snake was predicted based on the motion of the leading end. Tools used (Development tools - H/w, S/w): MATLAB Objectives of the project: To simulate the locomotion of a hyper-redundant snake robot moving in a three-dimensional obstacle course, in MATLAB. Outcomes of the project: We have been able to successfully move the simulated snake robot in predefined paths and through specified waypoints, Centre for Artificial 2016in two and three dimensional space. However, obstacle avoidance was a challenge, since we were unable to Intelligence & Robotics, 17prevent the body of the bot from colliding with the obstacle, although the head could be navigated around Bangalore sem1 the obstacle with ease. Major Learning Outcomes: Gained competency in MATLAB. Brief Description of working environment, expectations from the company:The working environment is not great. One is mostly on one's own, and there is little help or support from the organisation. Scientists are mostly busy with their own work, and there is neither encouragement nor any incentive to work very hard on the project and complete the work. A student who is very interested in and dedicated to research will find good work and good research projects, but not one who is not. The project deals with developing, a Call Data Record Visualizer and Analyser software tool for analyzing the CDR logs provided by the cell phone service providers in a Windows based application with enhanced capabilities for social network analysis using MathWorks advanced Matlab Guide Platform to give advanced user interface. The work implemented till now allows the user to do a basic statistical and social network analysis of CDRs. Though the organisation had a tool for doing a statistical analysis on CDR, there was none present for call pattern detection which till current is being done manually. The pattern detection logic embedded into the tool works pretty fast. The time taken for detection of a mediatormanger pattern using the tool when 2 CDRs were used was 1.671 s. For 3 CDRs it was 1.893s, similarly for 4 CDrs it was 2.145 s .The time complexity of the code used for the detection of the pattern which was embedded into the tool was O(log N) types where N is the sum of total number of rows in the Cdrs which were imported Hence the efficiency of the code is good enough as compared to the trivial method which is currently being used in the organization. The 100% efficiency of the tool in terms of output and result authenticates it to be further used for the call pattern detection in future. This tool can be enhanced by embedding various other call pattern detection logic. Tools used (Development tools - H/w, S/w): Matlab's GUIDE Platform Objectives of the project: In the tool the most important application we are focusing on is the social network analysis. The tool is basically used for the analysis of a suspects CDRs which in order is used to derive various other information like the movement of the suspect on particular day, the Centre for Artificial frequently people he /she is talking to. This analysis can hence be used to identify other potential suspects 2016-Intelligence & Robotics, whose call records can be kept under surveillance. Basically we try to reduce the chances for the occurrence 17of any mishap around the world by strictly keeping the suspects under surveillance through their call data Bangalore sem1 records. Here in the project the concept of link analyzer and unusual call pattern detection logic has been used to identify the potential suspects. Outcomes of the project: At present the unusual call patterns present in multiple CDRs are being detected by the organisation manually. So availability of a software tool which detects the call patterns fastens and automates this process of detection hence increasing the productivity of entire screening and surveillance process. Major Learning Outcomes: Increased capability of using Matlab's GUIDE Platform Learnt about \* Social Network Analysis \*Centrality Measures \*OSM(Open Street Mapping) Details of papers/patents:\*Community Detection and Behavior Study for Social Computing Huan Liu, Lei Tang, and Nitin Agarwal, Arizona State University ,University of Arkansas at Little Rock \*The Wealth of Networks by Yochai Benkler , Yale University Press New Haven and London \*Social Network Analysis for Startups, Maksim Tsvetovat and Alexander Kouznetsov Brief Description of working environment, expectations from the company:The work environment was good in terms of mentor's involvement and help provided. The only drawback which resulted in slowing our work a bit was limited access to internet that we were provided and exemption from carrying any storage devices inside the institute might have also resulted in slowing the work being carried there. But CAIR being a defense organisation this has to be a norm followed by trainees. So we had to mail the work we did on weekends. But overall in terms of the project and the guidance provided by the mentor made it a very informative and educative experience and a very suitable place to work for 6-month internships.

Experience Year Company The first part of the project was to implement an object detection system for a bot. This object recognition system trains the bot to recognize to certain familiar objects and accordingly it can take actions to change its path or to capture the object. This similar object recognition technique is to be used for bot which will traverse outside and should be able to distinguish between roads, paths or any other object it canencounter outside. This project involved making my own dataset for CAIR, getting it labeled and further feeding it in the neural network to achieve detection for bot. Second part of project is Activity Centre for Artificial 2016-Recognition so that bot is able to recognise any usual activities happening around its path or anywhere Intelligence & Robotics, 17nearby. This activity recognition is to be achieved via a Convolutional two stream model which has a spatial Bangalore sem1 layer and temporal layer. Tools used (Development tools - H/w, S/w): Python , Keras Objectives of the project: Achieve a robust object and action recognition system using deep neural networks. Outcomes of the project: Neural network model which could detect usual indoor and outdoor objects as well as action. Major Learning Outcomes: Learnt about different deep learning models and also how to achieve good results using convolutional neural networks Brief Description of working environment, expectations from the company:You're provided with a good enough system but without internet. Mentors aren't that strict. My project is all about rendering of 3D spatial data as web service which is basically building 3D maps. For this project I have used geotiff files as source data, and I have used java script, three.js, gdal plugin, mapnik, python to build 3D maps. Tools used (Development tools - H/w, S/w): three.js , gdal plugin ,java script , mapnik, python Objectives of the project: Rendering of 3D spatial data as web service Outcomes of the project: Building 3D maps Major Learning Outcomes: Built 3d maps of India that can be used by DRDO. Brief Description of working environment, expectations from the company:The work environment was good in CAIR and my mentor was helpful all the time. The major drawback was that we had no internet connection while working, because of which my work was going slow. Otherwise I would have accomplished much more than I did, and we cant take any pendrives or hard drivers inside CAIR which was also bad. My mentor expected to finish my project so that DRDO can use it as web application. Mentor NAME: MR. SRIKANTH NARASIMHAN Designation: Distinguished Engineer, IT Thank you for being Centre for Artificial 2016proactive in thinking about your interns before performance issues develop. Faculty NAME: MOHAMMAD Intelligence & Robotics, 17-SALEEM BAGEWADI Comments: Expectations from industry: At CISCO Systems you analyzes complex Bangalore sem1 business problems to be solved with automated systems or using data from internal and external sources. Provides technical expertise in identifying, evaluating and developing systems and procedures that are cost effective and meet user requirements. Configures system settings and options; plans and executes unit, integration and acceptance testing; and creates specifications for systems to meet business requirements. Building teams that are expanding technology solutions in the mobile, cloud, security, IT, and big data spaces, including software and consulting services. As Cisco delivers the network that powers the Internet, connecting the unconnected. Skill Sets:  $\square \square \square$  Design, develop, troubleshoot and debug software programs for enhancements and new products. Develop software and tools in support of design, infrastructure and technology platforms, including operating systems, compilers, routers, networks, utilities, databases and Internetrelated tools. Determine hardware compatibility and/or influences hardware design. Student Calculation of accuracy and precision of multiple object trackers using CLEAR MOT Statistics Tools used (Development tools - H/w, S/w): OpenCV, QtCreator, NVIDIA's Jetson, C++ Objectives of the project: Calculation of accuracy and precision of multiple object trackers using CLEAR MOT Statistics Outcomes of the project: Successfully debugged and tested a number of object trackers, while adding on a few blocks of code to it, and learnt the algorithms involved: Including MCMO, Adaptive MOT, GMM, TLD, MeanShift, CAMShift, Canny Edge Detection, Image Subtraction Major Learning Outcomes: Learnt C++, OpenCV, worked on Qt creator, wrote/added on to, debugged and tested multiple object trackers, and learnt about various algorithms including TLD, GMM, Image Subtraction and Canny Edge Detection Brief Description of working environment, expectations from the company: The working environment was far less than ideal. Centre for Artificial We did well in our project, but could have done much better. I witnessed multiple instances of highly 2016-Intelligence & Robotics, unprofessional behavior, that kept me from feeling comfortable in the environment I worked in, but more 17-Bangalore than that, it prevented me (and others) from giving the best we could, as professionals. Some such sem1 instances were also reported to PSD, and I truly applaud how they taught me to gracefully handle it. They were really helpful. However, I would strongly suggest against keeping CAIR as a PS2 Centre in the future. I was quite disappointed, and did not expect a PS2 work environment for BITS Pilani students to be so colossally unprofessional. In case you are unable to remove this as a PS station, do try to ensure mentors with reasonable and professional attitude for all. Professional ethics standards should be the same for everyone in the workplace. Lastly, since all this was excluding the financial problems, I must add that stipend is a necessity, in a city like Bangalore. We got Rs. 0/- for the entire July to December period, which included having to endure so much unnecessary havoc and coercion. And even though we ended up learning something, I don't see why we couldn't have done it anywhere else. It just simply wasn't worth it.

Company	Experience	Year
Centre for Artificial Intelligence & Robotics, Bangalore	We basically worked on the theory of vehicle dynamics and the first few days involved its theory, then we worked on developing PID heading angle controllers which was based in MATLAB. We estimated the cornering stiffness using vehicle parameters and designed true transfer function for our controller. Tools used (Development tools - H/w, S/w): MATLAB Objectives of the project: Designing harding angle controllers for autonomous ground vehicles Outcomes of the project: We designed PID controllers for agvs, developed the sterring actuator model for the vehicle, simulated all the results and compared them to the experimental ones. Major Learning Outcomes: Vehicle sensitivity analysis, Cornering stiffness estimation and Designing linear, nonlinear controllers. Brief Description of working environment, expectations from the company: The environment is pretty relaxed and there is a lot of work for people who are interested to work. The scientists are very helpful and their guidance proved very crucial for us.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Study of programming basics - DSA, fundamentals of autonomous robot navigation and SLAM techniques. In depth analysis of existing popular localization algorithms and modification of one such algorithm to include an extra variable of scale for each particle. Tools used (Development tools - H/w, S/w): C++, ROS, and Custom made bots running Ubuntu 14.04 Objectives of the project: For an autonomous robot employed in the field of search and rescue, localization can be left dependent on the availability of a detailed, accurate map of an area, as standard localization algorithms require a map in order to guess where it is on the map and use this information for further purposes such as path planning and exploration. This study aims to remove the need for a map, replacing it with a user input, semi-accurate map by modifying the existing AMCL algorithm in order to allow for minute inaccuracies. Outcomes of the project: A modified version of AMCL was built to cope with inaccuracies of scale and linearity in hand sketched maps. Though results were mixed, they can be improved upon by utilizing different versions of odometry, scanning and localization methods. Major Learning Outcomes: Programming fundamentals, fundamentals of autonomous robot navigation and localization Brief Description of working environment, expectations from the company: Working environment consists of a trainee room wherein all trainees have to be present most of the times, leading to a very unprofessional environment which is not conducive for either learning or working with full concentration. Internet facility is not officially provided but can be accessed through a separate internet room using some scientist's user credentials, but was mostly unused. Expectations may vary from scientist to scientist, but on average it is expected to stay in office for 6 hours, followed by additional research on work later on, since it's impossible to do so while at office.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	My work was related to robotics and computer vision. Objective was, given a goal to the robot, it should navigate to that point avoiding all the obstacles. It should also create a map of the environment while navigation. This problem is known as Simultaneous Localization and Mapping. Tools used (Development tools - H/w, S/w): ROS, CUDA Objectives of the project: SLAM Outcomes of the project: Map of the environment in the form of local and global costmaps, and path of the navigation process. Major Learning Outcomes: Robotics software development and debugging. Brief Description of working environment, expectations from the company: Working environment was good if you show interest in the field. Mentors have a good amount of practical experience who will help you if you ask them doubts. Some drawbacks are there like there is no internet inside the organization, only one internet room is there which can be used by trainees and no mobile phones allowed. As it is a government organization, there are a lot of rules and regulations in the starting of the PS.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Simulating the motion of a snake robot using MATLAB Tools used (Development tools - H/w, S/w): MATLAB Objectives of the project: To map the path followed by the tail of a robot when the path constraints for the head of the snakebot are given. Outcomes of the project: Successfully mapped the motion of the tail for a 12-link snakebot Major Learning Outcomes: MATLAB, Tractrix equation Brief Description of working environment, expectations from the company: Very poor working environment. Limited internet access made research work quite difficult. Scientists were usually busy, interaction was sparse. Computers given to us to work on were very slow and old.	2016- 17- sem1

Company	Experience	Year
Centre for Artificial Intelligence & Robotics, Bangalore	Calculation of precision and accuracy of multiple object trackers using CLEAR MOT statistics. Coding role initially, testing role later in which artificial intelligence is used to find objects and people in surveillance videos. Also dealt with computer vision tasks. Tools used (Development tools - H/w, S/w): OpenCV, CPP, CLEAR MOT, not challenge 2016 benchmark Objectives of the project: To find and improve (if possible) the accuracy and efficiency of trackers coded by scientists at the Centre. Outcomes of the project: Accuracy and precision found. Also multiple tasks completed in the fundamentals of computer vision and CPP to gain proficiency with tools. Major Learning Outcomes: Strong grasp of various computer vision concepts, coding in CPP. Gained familiarity with artificial intelligence topics. Became proficient in various tools like OpenCV. Brief Description of working environment, expectations from the company: Working environment was really good for research. Supportive mentor at CAIR, but he was busy during the last three weeks on an assignment and hence the project slowed then. Good knowledge base of all mentors, very helpful, they wanted us to produce original research work. But a lot more improvement would have occurred if regular access to the internet was provided.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Simulated a heading angle controller for unmanned ground vehicles on SIMULINK. Objectives of the project: To simulate a heading angle controller for navigating the vehicle. Outcomes of the project: Heading angle controller simulated and sensitivity analysis done. Major Learning Outcomes: Knowledge of control systems and vehicle dynamics. Brief Description of working environment, expectations from the company: Working environment was not very conducive for learning. No internet facility and outdated systems and processors made available, made research work very slow.	2016- 17- sem1
Centre for Artificial Intelligence & Robotics, Bangalore	Titled Snake Robot, the aim of my project was to simulate the locomotion of a hyper-redundant snake robot in MATLAB. The robot was modelled as a chain of rigid links connected by freely rotating joints. The motion of the snake was predicted based on the motion of the leading end. Tools used (Development tools - H/w, S/w): MATLAB Objectives of the project: To simulate the locomotion of a hyper-redundant snake robot moving in a three-dimensional obstacle course, in MATLAB. Outcomes of the project: We have been able to successfully move the simulated snake robot in predefined paths and through specified waypoints, in two and three dimensional space. However, obstacle avoidance was a challenge, since we were unable to prevent the body of the bot from colliding with the obstacle, although the head could be navigated around the obstacle with ease. Major Learning Outcomes: Gained competency in MATLAB. Brief Description of working environment, expectations from the company: The working environment is not great. One is mostly onone's own, and there is little help or support from the organization. Scientists are busy with their own work, and there is neither encouragement nor any incentive to work very hard on the project and complete the work. A student who is very interested and dedicated to research will find good work and good research projects, but not the one who is not.	2016- 17- sem1

Company Experience Year

The project deals with developing a Call Data Record Visualizer and Analyzer software tool for analyzing the CDR logs provided by the cell phone service providers in a Windows based application with enhanced capabilities for social network analysis using MathWorks advanced MATLAB Guide Platform to give advanced user interface. The work implemented till now allows the user to do a basic statistical and social network analysis of CDRs. Though the organization had a tool for doing a statistical analysis on CDR, there was none present for call pattern detection that was being done manually till now. The pattern detection logic embedded into the tool works pretty fast. The time taken for detection of a mediator- manger pattern using the tool when 2 CDRs were used was 1.671 s. For 3 CDRs it was 1.893s and for 4 CDRs it was 2.145 s. The time complexity of the code used for the detection of the pattern that was embedded into the tool was O(log N) types where N is the sum of total number of rows in the CDRs that were imported. Hence the efficiency of the code is quite good as compared to the trivial method which is currently being used in the organization. The 100% efficiency of the tool in terms of output and result authenticates it to be further used for the call pattern detection in future. This tool can be enhanced by embedding various other call pattern detection logics. Tools used (Development tools - H/w, S/w): MATLAB's GUIDE Platform Objectives of the project: In the tool, the most important application we are focusing on is the social network analysis. The tool is basically used for the analysis of a suspect's CDRs which in turn is used to derive other information like the movement of the suspect on a particular day, the people he /she is frequently talking to. This analysis can hence be used to identify other potential suspects whose call records can be kept under surveillance. Basically we try to reduce the chances of the occurrence of any mishap around the world by strictly keeping the suspects under surveillance through their call data records. Here in the project the concept of link analyzer and unusual call pattern detection logic has been used to identify the potential suspects. Outcomes of the project: At present the unusual call patterns present in multiple CDRs are being detected by the organization manually. So availability of a software tool

that detects the call patterns, fastens and automates this process of detection thereby increasing the productivity of entire screening and surveillance process. Major Learning Outcomes: Increased capability of using MATLAB's GUIDE Platform. Learnt about \* Social Network Analysis \*Centrality Measures \*OSM (Open Street Mapping) Details of papers/patents:\*Community Detection and Behavior Study for Social Computing Huan Liu, Lei Tang, and Nitin Agarwal, Arizona State University, University of Arkansas at Little Rock \*The Wealth of Networks by Yochai Benkler, Yale University Press, New Haven and London \*Social Network Analysis for Startups, Maksim Tsvetovat and Alexander Kouznetsov Brief Description of working environment, expectations from the company: The work environment was good in terms of mentor's involvement and help provided. The only factor which resulted in slowing our work down a bit was limited access to internet and restriction on carrying any storage devices inside the institute. So we had to mail the work we did on weekends. But overall in terms of the project, and the guidance provided by the mentor made it a very informative and educative experience and a very suitable place to work for 6-month

Centre for Artificial Intelligence & Robotics, Bangalore 2016-17sem1

Centre for Artificial Intelligence & Robotics, Bangalore internships.

The first project was to implement an object detection system for a bot. This object recognition system trains the bot to recognize certain familiar objects and accordingly to take actions to change its path or to capture the object. This similar object recognition technique is to be used for bot which will traverse outside and should be able to distinguish between roads, paths or any other object it canencounter outside. This project involved making my own dataset for CAIR, getting it labelled and further feeding it in the neural network to achieve detection for bot. Second part of the project is Activity Recognition so that bot is able to recognize any usual activities happening around its path or anywhere nearby. This activity recognition is to be achieved via a Convolutional two stream model which has a spatial layer and temporal layer. Tools used (Development tools - H/w, S/w): Python, Keras Objectives of the project: Achieve a robust object and action recognition system using deep neural networks. Outcomes of the project: Neural network model that could detect usual indoor and outdoor objects as well as activities. Major Learning Outcomes: Learnt about different deep learning models and how to achieve good results using convolutional neural networks Brief Description of working environment, expectations from the company: You're provided with a good enough system but without internet. Mentors aren't that strict.

2016-17sem1

Experience Year Company My project is all about rendering of 3-D spatial data as web service which is basically building 3-Dmaps. For this project, I have used geotiff files as source data and I have used java script, THREE.JS, GDAL PLUGIN, MAPNIK, PYTHON to build 3-D maps. Tools used (Development tools - H/w, S/w): THREE.JS, GDAL PLUGIN, JAVA SCRIPT, MAPNIK, and PYTHON Objectives of the project: Rendering of 3-D spatial data as web service Outcomes of the project: Building 3-D Maps Major Learning Outcomes: Built 3-D Maps of India that can be used by DRDO. Brief Description of working environment, expectations from the company: The working environment was good in CAIR and my mentor was very helpful all the time. The major drawback was that we had no internet connection while working because of which my work was going slow, otherwise I could have accomplished much more than I did. Also we couldn't take any storage devices inside CAIR which was also quite inconvenient. Mentor Designation: Distinguished Engineer, IT Thank you Centre for Artificial 2016for being proactive in thinking about your interns before performance issues develop. Faculty Comments: Intelligence & Robotics, 17-Expectations from industry: At CISCO Systems you analyzes complex business problems to be solved with Bangalore sem1 automated systems or using data from internal and external sources. Provides technical expertise in identifying, evaluating and developing systems and procedures that are cost effective and meet user requirements. Configures system settings and options; plans and executes unit, integration and acceptance testing; and creates specifications for systems to meet business requirements. Building teams that are expanding technology solutions in the mobile, cloud, security, IT, and big data spaces, including software and consulting services. As Cisco delivers the network that powers the Internet, connecting the unconnected. Skill Sets: [] Design, develop, troubleshoot and debug software programs for enhancements and new products. [] Develop software and tools in support of design, infrastructure and technology platforms, including operating systems, compilers, routers, networks, utilities, databases and Internetrelated tools.  $\sqcap$  Determine hardware compatibility and/or influences hardware design. Student Worked on the Unsupervised Domain Adaptation (a concept of Deep Learning), created a convolution neural network in caffe and using the bvlc\_reference\_caffemodel to train it, implementation of Wasserstein-1 metric as loss function using the concept of wasserstein generative adversarial network to reduce the distribution distance between the target and the source domain. Tools used (Development tools - H/w, S/w): Caffe, Tensorflow Objectives of the project: UNSUPERVISED DOMAIN ADAPTATION USING WASSERSTEIN METRIC Outcomes of the project: The accuracy of Domain Adaptive Network was Centre for Artificial 84.7% and that of Residual Transfer Network was 73.7%. Major Learning Outcomes: Wasserstein Metric 2017-Intelligence & Robotics, outperform other distribution distances to solve the problem of domain adaptation. Brief Description of 18working environment, expectations from the company: The organization is a place which broadens your Bangalore sem1 thinking level. Everyone here is working on some new cutting edge projects. Since the organization is the part of Defence Research and Development Organisation, a police verification is a must to enter. The scientists at the place are very helpful and expect you to come up with innovative ideas and solutions to the problem. You can find scientists working in multiple domain like geo-spatial mapping, deep learning, image processing, signal processing, robotics etc. Academic courses relevant to the project: Machine Learning. Trajectory Planning of a four wheeled Steered Robot. Objectives of the project: To develop a trajectory for a given path for a four wheeled steered robot Outcomes of the project: Developed equations for the Centre for Artificial 2017trajectory of the robot Major Learning Outcomes: Learned about Robotics and its different fields and Intelligence & Robotics, 18applications Brief Description of working environment, expectations from the company: Work environment Bangalore sem1 is good. Support from the mentors is less relatively. Timings of the institutions is lenient. Overall a good experience. Academic courses relevant to the project: Could add a new course about robotics. The project was mostly study oriented. Literature survey was done on Flapping Wing aerodynamics and design, along with studying CFD and FEA. At the end, some simulations on OpenFOAM were performed for the final presentation Tools used (Development tools - H/w, S/w):OpenFOAM, GNU-Octave Objectives of the project: Study of the aerodynamic mechanisms involved in flapping wing flight, from a computational perspective Outcomes of the project: As the project was study oriented, the outcomes were mostly in terms of knowledge and skills acquired. Major Learning Outcomes: Computational Fluid Dynamics, Finite Centre for Artificial 2017-Element Analysis, Fluid Structure Interaction Brief Description of working environment, expectations from Intelligence & Robotics, 18the company: Trainees are more-or-less confined to a training room, provided with a desktop (without Bangalore sem1 internet) with either windows, debian or ubuntu. Commercial software like Matlab and Adams are available. Hardware related work is not possible as the workshop is not accessible. Beefy systems, mostly tailored to parallel processing on GPUs, are provided if required for the project work. The PS centre is suited to AI, machine learning etc related projects. Academic courses relevant to the project: Fluid Mechanics, Numerical Fluid Flow and Heat Transfer, Computational Fluid Dynamics, Finite Element Method Student

Company	Experience	Year
Century Enka Ltd	First few weeks we completed the industrial training of the plant. We were explained the complete processes happening in the plant and the products and outcomes of each department. Then we were assigned projects according to our interests and preferences in various departments. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: To study the twisting tension variation in CC machine Major Learning Outcomes: Learning the Working principle of complete IY department. In depth working of cable corder. Brief Description of working environment, expectations from the company: The working environment is pretty good. All the members of the plant are very helpful and will guide you whenever needed. Academic courses relevant to the project: polymer technology	2018 19- sem1
Century Rayon , Mumbai	The project involved optimization zinc extraction from waste sludge which has currently been dumped out in form of waste. The process is important not only for cost effective nature of mineral(zinc) but also to meet government norms of zinc concentration in waste effluent (5ppm). The various precipitation methods worked on include using Na2S, using bleach and HCl these methods were tested on lab scale and later most optimized method (use of Bleach and 11% (weight/volume) HCl) for used for large scale analysis of cost and process flow diagram was formed for the same. Tool used (Development tools - H/w, S/w): Laboratory Equipments like Flask, Weighing Balance, Filterate Paper Large Drum to store sample, Boiler etc Objectives of the project: Zinc Recovery From Waste Sludge Major Learning Outcomes: Learnt Various methods about zinc recovery of which recovery through bleach and HCl (11% w/v) with sludge was most optimum method. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Process Design and Principles, Engineering Chemistry	2019 20- sem1
Century Rayon , Mumbai	Zinc is a very important component in the production of Viscose Rayon Yarn. It is primarily responsible for the strength and tenacity of the yarn by retarding the rate of regeneration of cellulose while spinning. Zinc is very poisonous but it is significant in the process of Rayon Production, hence it cannot be eliminated from the process. Thus, it also makes its way into the wastes of the rayon industry. Due to the poisonous of Zinc even in small quantities, Government norms prevent its release into the environment at concentrations higher than 5ppm and is removed at the ETP in the form of sludge. Zinc is a considerably costly metal. By recovering the Zinc before it reaches the ETP not only we can save a lot of money on zinc itself, but we can also save it on the waste disposal as well as the load on ETP and the sludge generated will also be reduced. When looked at various methods of Zinc recovery, most of them (Electrolysis, Liquid-Liquid extraction, etc.) come out to be costly. Keeping that in mind, we worked towards using readily available materials in the company for recovery using simple methods like double ion exchange using resins. Tool used (Development tools - H/w, S/w): Resins and other general Chemicals and lab equipments Objectives of the project: Zinc Recovery Major Learning Outcomes: 1. Understanding how to find conc. of Zn in a given sample 2. Understanding the working of a resin Details of Papers/patents: Brief Description of working environment, expectations from the company: Very friendly and helpful Academic courses relevant to the project: Separation Processes 1 and 2	2019 20- sem <sup>2</sup>
Century Rayon , Mumbai	Zinc is a significant component in the production of Viscose Rayon Yarn and cannot be eliminated from the process. Thus, it makes its way into the wastes of the industry. However, due to its poisonous nature, Government norms prevent its release into the environment at concentrations higher than 5 ppm. By recovering this Zinc before it reaches the ETP, not only we can save a lot of money on zinc itself, but we can also save it on the waste disposal as well as the load on ETP. Keeping that in mind, we worked towards using readily available materials in the company for recovery using simple methods like double ion exchange using resins. Tool used (Development tools - H/w, S/w): Resins, Laboratory Equipment and other chemicals required Objectives of the project: The main objectives of the project is developing an industrially feasible process for the recovery of zinc from the waste effluent and also reducing the concentration of Zinc to less than 5ppm as suggested by government norms. Major Learning Outcomes: 1. Understanding how to find the concentration of Zinc in a given sample 2. Understanding the capacity of resins to absorb Zinc Details of Papers/patents: Brief Description of working environment, expectations from the company: Century Rayon creates a wonderful environment for learning both soft and hard skills. Their exemplary guidance, constant encouragement and careful monitoring through the internship are the main reasons which helped us in finishing the project. The main aim of Century Rayon is to develop a economical and industrially feasible process to recover the zinc which is being wasted thereby mitigating the losses of the company. Academic courses relevant to the project: CEL-1, Chemical Processes and Calculations Bangalore Student	2019 20- sem

Company	Experience	Year
Cerner, Bangalore	I have been an integral part of Cerner Smart Health team. I contributed in UI design changes of application. Helped in generating reports from the data collected. Created a new database based on new requirements. Created a chat bot model which can be part of the application in future. Tools used (Development tools - H/w, S/w): HTML, JavaScript, PHP, Java, Android Studio, Node Js Objectives of the project: To develop an application which is helpful in performing health checkup of students and generating reports. Outcomes of the project: Made UI changes depending on latest needs. Performed bug fixes based and integrated those changes in new update. Helped in generating reports from the data collected. Brief Description of working environment, expectations from the company: I have been a integral part of Cerner Smart Health team for past 6 months. They expect me to perform the tasks given to me in given duration. We get requirements from clients regarding the functionality they need in the app. Our manager evaluate the needs and spreads the tasks among the team to perform it. We make the neccessary changes and integrate them in the new update. Academic courses relevant to the project: Data Structures and Algorithms, Object oriented Programming, DBMS, Computer Networks	2017- 18- sem1
Cerner, Bangalore	My work mainly revolved around the development of Cerner Smart Health(CSH) which is an app used to screen school children for health issues. This included the integration of Aadhar API to authenticate students while screening and club the health data with their aadhar. Among other things included writing prepared statements for all the SQL queries in the app, optimizing SQL queries to reduce the response time, writing logic to display the summary of the child condition using the values given while screening. To research about Dialog flow and how it can be used to use speech to fill screening data in CSH. Tools used (Development tools - H/w, S/w): Git,Atom,Android Studio,Xampp Objectives of the project: To integrate Aaadhaar Authentication API into CSH Outcomes of the project: Aadhar API integration and major developments in the application Major Learning Outcomes: Knowledge about full stack development and API integration. Brief Description of working environment, expectations from the company: You are given ample amount of time in the beginning to get used to the project environment and the technologies being used. You are free to ask your mentor about anything. You are expected to be pro-active since the company expects high performance from Bitsians. Academic courses relevant to the project: Object oriented Programming, Data Structures and Algorithms, Cryptography	2017- 18- sem1
Cerner, Bangalore	Software development, debugging and testing. Tools used (Development tools - H/w, S/w): Java script, php, html, css. Objectives of the project: Android app development. Outcomes of the project: Application of Cerner Smart Health Major Learning Outcomes: Technologies used here. Brief Description of working environment, expectations from the company: Good working environment, but over crowded. Still if the manager is good and cool then you'll like the work and company both.	2017- 18- sem1
Cerner, Bangalore	Web/Application Development on Android-based Hybrid App and Automated Testing Tools used (Development tools - H/w, S/w): Languages - Java, JavaScript, PHP, SQL Other platforms: DurandalJS, Appium/Selenium, WebSQL and MySQL Objectives of the project: To build an Android-Application, and test function using automated unit and functional testing Outcomes of the project: Functional application, tested within requirements set for the team by the client, with Data security at database and application level Major Learning Outcomes: Android Development, Automation, Teamwork, Data Security Brief Description of working environment, expectations from the company: Not a difficult project. You get your device(laptop) from the company and then are briefed about working, rules and guidelines for the first two days. You will be allotted managers and to a team dedicated to a project. Challenges faced will be in terms of acquainting yourself to the requirements as compared to what you might have learnt previously. Team members are very friendly and will acclimatize you to the team. They help you all the way and make working there comfortable. Willingness to work hard and insistence to work will be rewarding and will lead to a good overall experience. Academic courses relevant to the project: DSA, DBMS, Software Development in portable devices, Cloud Computing Bangalore Student	2017- 18- sem1
Cisco Bangalore	My Project was a part of Cisco's ongoing Project ***, The major task was to verify the Egress Buffers in the ASIC. To verify the module I had to create a testing environment that can replicate all the possible corner cases where the design can fail. Tool used (Development tools - H/w, S/w): VCS (Synopsys simulation tool), Questa (Mentor Graphics simulation Tool), vim (Text Editor), DVE (Synopsys dump analysing tool), Visualizer (Mentor Graphics dumping tool), GIT (Repository Management). Major Programming Language: System Verilog (Creating Testing Environment), Perl (For Data Extraction and Analysis) Objectives of the project: Verification of Egress buffer Major Learning Outcomes: 1) Environment Development In System Verilog 2) Design Flow of an ASIC (Application Specific Integrated Circuit) 3) Scripting and Data extraction using Perl 4) Different Verification Methodologies and tools used at industrial level Brief Description of working environment, expectations from the company: The working Environment is very good, the team members are supportive, they Encourage Discussions (ie there is no bias with interns in any manner, you can reason with any of the member irrespective of their age freely). Academic courses relevant to the project: Digital Design, Microprocessors and Interfacing Name: Suyash Bagadia (20150255)	2018- 19- sem1

Company	Experience	Year
Cisco Bangalore	Testing and verification of ASIC chips: Created the complete testing environment in System Verilog which has the ability to replicate all the possible runtime cases according to the verification plan. The aim of the project is to test the module on each and every corner case possible which can ensure the designer that the module is robust enough to be synthesized and placed in the ASIC. Tool used (Development tools - H/w, S/w): VCS synopsis, QUESTA mentor graphics, DVE synopsis Objectives of the project: The project's goal is to test and verify the egress buffer module from scratch, primary purpose for verification is to detect failures so that bugs can be identified and corrected before it gets shipped to costumer. If RTL designer makes a mistake in designing or coding, this results as a bug in the Chip. If this bug is executed, in certain situations the system will produce wrong results, causing a failure. A single mistake may result in a wide range of failure symptoms So we have to prepare a verification plan for Egress Buffer which is a memory block and test the module on every corner case possible Major Learning Outcomes: System Verilog – HDL UNIX commands GVIM –Text editing Different Simulations tools to analyse the test bench like vcs, questa, dve etc Brief Description of working environment, expectations from the company: The work environment in cisco is the best that i have ever seen, people here are very helping and motivating. The one thing that i liked here the most is the freedom of ownership of work, even as a fresher i was assigned the same work that people with years of experience are doing .Apart from the work people here also gives equal values to cultural festivities and moral values and also <i>Team outings</i> . Academic courses relevant to the project: Digital design ,microelectronics ,analog and digita vlsi design ,computer architecture Name: SANJANA TANKALA (2015AAPS0265H)	2018- 19- sem1
Cisco Bangalore	Parking lot detection with OpenCV: Built a system which aids riders/drivers to seamlessly park their cars in huge parking lots by following the directions shown to empty parking lots. In the back end directions are driven by OpenCV, MQTT broker and Cisco EFM (Kinetic Edge and Fog Module). Aironet Developer Program Hardware Development Kit Sensor Integration with Raspberry Pi: The project utilizes an AP3800 with the ADP Hardware Development Kit. A Raspberry Pi is used to read the values from the temperature sensor on board the HDK. The Raspberry Pi is configured to run InfluxDB and Grafana for visualizing the temperature and humidity data via web browser. Tool used (Development tools - H/w, S/w): Python, EFM, Raspberry Pi, Bash Scripting Objectives of the project: Learn and appreciate end-end product dev Major Learning Outcomes: got practical exposure to various topics taught as theory(ML, Networking, etc.). Brief Description of working environment, expectations from the company: We are a part of ThingQbator team of Cisco and hence had a lot of exposure to high end technologies. We worked in the lab and even though there were plenty of interesting things to do, there isn't much guidance from the mentors. However, this taught us how to tackle problems on our own and built our team work skills. Academic courses relevant to the project: Communication Networks, Machine Learning, Programming Name: Naga Sri Harsha Vadrevu (2015A7PS0004H)	2018- 19- sem1
Cisco Bangalore	The Bird's Eye project revolutionizes the way in which House Keeping Services work. Companies can reduce costs by effective and less housekeeping usage. Using this project will increase accountability because there will always be a person to whom a request is sent. These Housekeeping services can be monitored using a central fog directory giving full control and monitoring capability to the management. The Indoor SLAM Project can help individuals or companies to effectively place their switches/routers to achieve uniform WiFi signal strength in their homes or workplaces. It can effectively draw a floor map and remotely monitor WiFi signal strengths of a building. Tool used (Development tools - H/w, S/w): EFM, Python, Arduino IDE, Android, Ubuntu Objectives of the project: Bird's Eye, SLAM autonomous robot Major Learning Outcomes: IoT Brief Description of working environment, expectations from the company: Work place is good. We didn't have a lot of resources. We didn't have a mentor during this internship. Having a mentor would have been better. Name: Naved Nagi (2015A7PS0002P)	2018- 19- sem1

Experience Year Company Project 1 - The project is to develop a Serial Data ingesting system which can be uploaded as a DS Link on the Cisco Propriety Software - EFM (Edge and Fog Module). This is then to be extended to integrate temperature and humidity sensors and the IR829 router and Cisco Servers. Sensors will be integrated with an Arduino Uno board and will send data serially to the IR829 (Fog node) which will perform some form of data aggregation and send the rest up to the Server. The setup can be then used in industries to remotely control prevalent conditions. Project 2 - This project is to develop an application which runs a Neural Network on Raspberry Pi (Edge). This Pi will be used along with a camera to keep count of the number of people in the thingQbator Lab. A Raspberry Pi by itself is not capable of running full scale Object Detection 2018-Algorithm by itself. Hence a VPU co – processor, the Intel Movidius is used along with the Pi. The code uses Cisco Bangalore 19a compact version of the common CNN, mobilenetSSD as a neural net. Tool used (Development tools - H/w, sem1 S/w): Python, EFM, Raspberry Pi, Bash Scripting Objectives of the project: Learnt and appreciate end-end Product development Major Learning Outcomes: Got practical exposure to various topics taught as theory (ML, Networking, etc.). Learnt how to integrate software with hardware. Brief Description of working environment, expectations from the company: We were part of the thingQbator team of Cisco and hence had a lot of exposure to High end technologies. We worked in the lab and even though there were plenty of interesting things to do, there isn't really much guidance from the mentors. However, this actually taught us how to tackle problems on our own and built our team work skills. Academic courses relevant to the project: Computer Networks, Machine Learning, Programming Name: ANJAN DAS (2015A7PS0150P) 1. Developed a dApp based on Ethereum TestRPC which creates and manages Identity of various entities which transact amongst each other in a network. 2. Developed a People Counter application based on Machine Learning which takes live feed from Cisco Surveillance Camera and detects the number of people present in a room using a cloud-based high-performance Nvidia Tesla GPU. Tool used (Development tools -H/w, S/w): 1. Ubuntu VM, Ganache-cli, Truffle, HTML, CSS, BootStrap, JavaScript, Node.js, web3.js, Solidity 2. Ubuntu VM, Cisco Surveillance Camera CIVS-IPC 6500 PD, Cloud-based Nvidia Tesla GPU, Cisco EFM Server, Python 3, imutils, dlib, Numpy Objectives of the project: 1. To develop a Distributed Identity 2018-Platform for Customers, Organizations and Things using Blockchain Technology 2. To report the number of 19-Cisco Bangalore people in the thingQbator Lab over MQTT and present it in the Cisco EFM Dashboard Major Learning sem1 Outcomes: 1. Blockchain Technolgy 2. dApp Development 3. Machine Learning/Object Detection/Object Tracking 4. Cisco EFM Dashboard Designing Details of Papers/patents: Libraries used were Open Source Brief Description of working environment, expectations from the company: Work environment at thingQbator Cisco is good. You have the flexibility to define your project goals on your own. People are friendly and helpful. Overall, you can expect a good and smooth internship experience from the company. Academic courses relevant to the project: Computer Networking(somewhat), Machine Learning The problem, though initially a seemingly unsurmountable one, is only a collection of simpler, easyto-code smaller problems, that require some knowledge to begin with. A lot of time was invested into learning the basics of what we were going to do, including learning the libraries, the program architecture and the corresponding nuances that it encompasses. The time spent on programming the solution was no too much, however, it too demanded some thinking. The majority of time was however spent in testing the code. Since there was no simpler way to ensure the full working of the code base, regular trips with the bot was made, in order to test every phase of the solution build. The solution we made was broken down into the following phases: Depth Map generation, 2D Mapping, Localisation, Implementing static transforms, Waypoint navigation, Obstacle detection and avoidance, Autonomous functionality, IoT based control. Tools used (Development tools - H/w, S/w): Turtlebot Objectives of the project: Inventory management and wifi mapping Outcomes of the project: ¢ Depth Map generation ¢ 2D Mapping ¢ Localisation ¢ 2017-Implementing static transforms ¢ Waypoint navigation ¢ Obstacle detection and avoidance ¢ Autonomous Cisco Systems (India) Pvt. 18functionality ¢ IoT based control Major Learning Outcomes: Learnt ROS (robot Operating System) from Ltd - Embedded Systems, sem1 scratch. Brief Description of working environment, expectations from the company: Everyone at cisco is friendly, you don't use sir/ma'am to address anyone, which makes it more cool. People will sit for hours if you have some doubts or stuck at some point in the project. Now let me take you through the lab (called thingQbator) i'm working at. It's a IoT makerspace where you can build your idea into a prototype. It's a dream place for an engineer. You can build stuff (you can burn stuff too 🛶), you can literally do whatever you want. From what i felt when i entered this place, i can say that it's a second BITS. Flexible timings, less workload, work life integration and what not. Academic courses relevant to the project: C, ML, and some basics of EEE F111 Bangalore Faculty Comments: Expectations from industry: IoT, Android Mobile App development, Robotics OS Irrespective of the degree program students can be equipped with knowledge on Data Analytics, Automated Testing methods, Machine learning, Cloud computing and Network security basics. Student

Company	Experience	Year
Cisco Systems (India) Pvt. Ltd - Machine Learning,	Even though IoT is showing so much growth and has impacted so many fields, on ground implementation of it still requires to overcome certain challenges to produce results. Some major challenges are: 7,· Cost 7,· Scalability 7,· Ease of installation 7,· Interoperability 7,· Privacy 7,· Security The framework created in this project attempts to overcome these challenges by utilizing existing devices and technologies. The project consists of three major parts: 1. Hardware and it's coding: The hardware was procured from external vendor. It was then coded to be configured by mobile app and then controlled and monitored using API's exposed by CAM. 2. Cisco Asset Manager setup: It is a Cisco proprietary software where asset properties, logic for monitoring and control was defined and several API's were exposed for mobile app. 3. Mobile App: An android app was developed which would fetch floor plan, device properties etc. from CAM for configuring IoT assets. Tools used (Development tools · H/W, S/W): CAM, Android,AWS, Javascript H/W: Electrodragon Wi-Fi IoT Relay Board Objectives of the project: The project aims to create a frame work for installing, configuring and real time monitoring of large number of IOT devices over multiple geographical locations in a easy, reliable, scalable, cost effective and secure manner. Outcomes of the project: In this project the basic framework has been created. The framework comprises of Electrodragon Wi-Fi IOT Relay Board Based on ESP8266, Cisco Asset Manager and an android app. This can be modified for other types of IOT devices and sensors by replacing the Electrodragon module with appropriate module. Some parts need modifications to improvise it. The interoperability has also been implemented. There are few areas which requires better abstraction to enable easy adaption for other kinds of devices. Major Learning Outcomes: Learning: Technical skills: 1. Hardware coding 2. App development 3. Cisco Asset Managerns Botter abstraction to enable easy adaption for other kinds of devices.	2017- 18- sem1
Cisco Systems (India) Pvt. Ltd - Software Engineering ,	Entire design flow of ASIC design and verification. Learning Formal Verification tools such as System Verilog, DVE Synopsys, UVM. Testing methods. Developing the first level of testing check for an RTL developed by Cisco. Covering border cases, negative cases, and normal cases. Exhaustive testing and debugging. Tool used (Development tools - H/w, S/w): System Verilog, DVE Synopsys, VNC Viewer, Objectives of the project: Develop module based, then class based and eventually UVM based testbench for a sample RTL. Develop assertions file to serve as the first level of protocol checking for a design of DDR Controller. Major Learning Outcomes: Learning how coding for hardware is different from normal software coding. How to do formal testing using UVM. Different constructs that apply only to hardware. How to do backtracking of bugs and different testing methods Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Analog Digital VLSI Design, Digital Design, VLSI Architecture Brief write-up on PS-II station: CloudCherry- It is taken over by CISCO now so from now on the requirements might come via CISCO. Till now their need was more around Java, .NET, AI/ML, Python. Groww- Java, Spring MVCframework. Sapient: Python, Java, AI/ML Student	2019- 20- sem1
Cisco Systems (India) Pvt. Ltd - Software Engineering,	Open source and version control system. Initial was migration of files from one vcs to another. Another involved OpenVswitch Tools used (Development tools - H/w, S/w): Perforce, Git, OpenVswitch, mininet, virtualbox Objectives of the project: Making things efficient for the team Outcomes of the project: Migration of files successful Major Learning Outcomes: Time management, communication Brief Description of working environment, expectations from the company: Okay work environment, not much work for interns though. Limited expectations for future prospects. Academic courses relevant to the project: Computer Networks, Operating Systems.	2017- 18- sem1
Cisco Systems (India) Pvt. Ltd - Software Engineering,	Setup of perforce server, replica server, proxy and scripts created for handling of minor issues like memory left and informing when replica goes down Tools used (Development tools - H/w, S/w): VNC Objectives of the project: Setup Perforce for the company Outcomes of the project: Perforce Setup Major Learning Outcomes: Perforce functionality Brief Description of working environment, expectations from the company: Work environment is very good. People in the company are very helpful. Student	2017- 18- sem1

Company	Experience	Year
Cisco Systems (India) Pvt. Ltd. , Bangalore	My work involved designing an iOS app in Xcode and delivering it for alpha testing. It included learning a new language Swift as well as the IDE required for iOS app development, Xcode. It involved the front end design on storyboard and all the necessary code for its functioning such as fetching data from the server based on a user differentiator and posting data on the server, different notifications to the user, etc. It also involved exploring machine learning algorithms and learning about recommender systems. Tools used (Development tools - H/w, S/w): Xcode, Swift Objectives of the project: Develop an iOS app which contextually helps employees with appropriate food suggestions. Outcomes of the project: Pilot version of iOS App Major Learning Outcomes: iOS app development, recommendation systems Brief Description of working environment, expectations from the company:Working environment was good. Mentors were helpful. I was on my own to learn the language as well as the other tools, so that took some time. Since none of my mentors knew Swift hence it caused a little more time to remove the glitches in the app. There were conference calls with my co mentor almost on a daily basis which helped to keep the pace of project in check. Faculty NAME: SANDEEP KAYASTHA Comments: Expectations from industry: Marketing orientation. Student	2016- 17- sem1
Cisco Systems (India) Pvt. Ltd., Bangalore	I always thought I knew networks by knowing only application layer programming. But it all changed after being part of Cisco. Lots of learning happened. It helped me to evaluate my performance and understand my strength and weakness, on the basis of which I could decide the future course of action. My mentor's hard work inspired me a lot. I shall work harder in life keeping him as my inspiration. Having industrial exposure, I came to know how things were done practically in networking, hence improved my knowledge base. I am going to build on the concepts I have learnt in this span of 5 1/2 months.	2015- 16- sem1
Cisco Systems (India) Pvt. Ltd., Bangalore	My work involved designing an iOS app in Xcode and deliver it for alpha testing. It included learning a new language Swift as well as the IDE required for iOS app development, and Xcode. It involved the front end design on storyboard and all the necessary code for its functioning such as fetching data from the server based on a user differentiator and posting data on the server, different notifications to the user, etc. It also involved exploring machine learning algorithms and learning about recommender systems. Tools used (Development tools - H/w, S/w): Xcode, Swift Objectives of the project: Develop an iOS app which contextually helps employees with appropriate food suggestions. Outcomes of the project: Pilot version of iOS App Major Learning Outcomes: iOS app development, recommendation systems Brief Description of working environment, expectations from the company: Working environment was good. Mentors were helpful. I was on my own to learn the language as well as the other tools, so that took some time. Since none of my mentors knew Swift hence it caused a little more time to remove the glitches in the app. There were conference calls with my co mentor almost on a daily basis which helped to maintain the pace of the project. Faculty Comments: Expectations from industry: Student	2016- 17- sem1
Cloudcherry Analytics Pvt Ltd , Bangalore	As part of the product team, building and rendering views/charts for data science algorithms. Visualization built for N-Gram Analysis and Regression (with Confidence Interval), ANOVA (Analysis of Variance), T-Test. Building web apps using Angular. Building full stack web apps using Flask(Python) and Angular 8. Tool used (Development tools - H/w, S/w): Angular 8 Objectives of the project: Developing widgets for CloudCherry product Major Learning Outcomes: Front-end webdevelopment (Angular), Backend microframework(Flask) Details of Papers/patents: Brief Description of working environment, expectations from the company: Excellent working environment. Everyone from the mentor you are assigned, to the manager you report to are super helpful and make you feel very comfortable at work place. Academic courses relevant to the project: OOPS Student	2019- 20- sem1

Company	Experience	Year
CloudCherry Analytics Pvt. Ltd.	I was allotted two projects during my PS II duration. The first project required me to build a cross-platform mobile app that could perform facial recognition using just 2D pictures captured by the device. I was instructed to use only OpenCV and TensorFlow to achieve this as they are open-source libraries/framework. As a result I picked up learning about CNN and Deep Learning along with basics of major ML algorithms. This project was more research oriented. The second project required me to build production quality code to perform one-sample T-Tests in C#. As a result this project revolved around optimizing the run-time, time complexity along with the appropriate use of Data Structures. This project was software dev oriented. Tool used (Development tools - H/w, S/w): Python, OpenCV, TensorFlow, Keras, C#, Visual Studio, Restful Services Objectives of the project: 1) Build a cross-platform face recognition mobile app that runs entirely on the client side. 2) Develop Production Quality code to run t-tests on the given dataset Major Learning Outcomes: 1) ML, Al, DeepLearning, Neural Networks 2) C#, APIs Brief Description of working environment, expectations from the company: The working environment is great. Each intern was assigned a mentor to guide him/her throughout their project. We didn't have any fixed timings that we had to follow but were given the liberty to choose our own and entrusted with responsibility of completing our tasks given to us in the stipulated time. Maintaining a work-life balance is encouraged over here. We had occasional team lunches and office activities. Academic courses relevant to the project: DSA, ML, Neural Networks, Prob Stats Name: Saketh Chintapalli (2015AAPS0970H) Tool used (Development tools - H/w, S/w): Python, Sci-kit learn, OpenCV, C#, .NET Objectives of the project: Emotion Recognition Algorithm, API Development Major Learning Outcomes: Machine Learning, Full Stack Web Development Academic courses relevant to the project:	2018- 19- sem1
Cogoport - Non Tech , Mumbai	I worked with Platform team, 1. getting shipping schedules on various shipping line website and upload it to cogoport portal. 2. Seaintel data accuracy checking. 3. Acquiring Data of various companies, along with their IEC and cleaning files to be made ready to upload for data enrichment process. 4. Write ad-hoc queries in mongodb to extract data. 5. Collecting insights for various import export commodities. Tool used (Development tools - H/w, S/w): Ms Excel, Jupyter notebook, Canva Objectives of the project: To maximize revenue of cogoport by acquiring maximum shipping schedules and rates to be displayed on cogoport website. Major Learning Outcomes: Python Coding, aggregate IECs for uploading at data enrichment Details of Papers/patents: - Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Data structures and algorithms.	2019- 20- sem1
Cogoport - Non Tech , Mumbai	PART OF THE SUPPLY TEAM WHICH DEALT MAINLY WITH LANDSIDE EXPANSION OF COGOPORT. THIS INCLUDED INCORPORATING TRUCKING LOGISTICS FEATURE ONTO THE PLATFORM. DEALTH WITH STRATEGIC SERVICE PARTNERS AND FREIGHTF FORWARDERS AND TOOK CARE OF SHIPMENT EXECUTION Tool used (Development tools - H/w, S/w): NONE Objectives of the project: TO ONBOARD TRUCKING PARTNERS AND TAKE CARE OF SHIPMENT EXECUTION BEFORE MIGRATION ONTO THE NEW VERSION OF COGOPORT Major Learning Outcomes: GOT A DETAILED UNDERSTANDING OF THE OPERATION PROCESSES INVOLVED WITH CARRYING OUT A SHIPMENT AS WELL AS THE SKILLS REQUIRED TO DEAL WITH SUPPLIERS Details of Papers/patents: - Brief Description of working environment, expectations from the company: WORKING ENVIRONMENT WAS GOOD TO BE IN. Academic courses relevant to the project: SUPPLY CHAIN MANAGEMENT	2019- 20- sem1
Cogoport - Non Tech , Mumbai	Was a part of the marketing team at Cogoport. Handled various campaigns in the domain of SEO, Email Marketing, Advertisements, PR, Internal communications etc. Tool used (Development tools - H/w, S/w): Moz, KeywordResearch, Autopilot, SQL, Excel, Mailchimp Objectives of the project: To improve the brand awareness of Cogoport Major Learning Outcomes: Got to know a lot about how marketing in an organization takes places. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Market Research, Business Communication	2019- 20- sem1
Cogoport - Non Tech , Mumbai	At Cogoport, I was working as a Demand Consultant. My role included contacting various exporters and importers based in Mumbai, setting up a meeting with them and finally convincing them to come over to Cogoport Online Platform for carrying out their export/import in the meeting. Once they agree I had to look after their shipments and guide them in the paperwork required henceforth. Tool used (Development tools - H/w, S/w): CRM, Excel Objectives of the project: To identify market sectors and segments which had high demand in that period of time. Major Learning Outcomes: Complete working of foreign trade, development of soft skills Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: NA Brief write-up on PS-II station: Essential prerequisite courses required before working on the project OOP, Operating Systems, Software development basics, Computer Networks Ruby on rails, react, PostgreSQL DBMS, OOP,OS Software Development for portable devices Student	2019- 20- sem1

Company	Experience	Year
Cohesity Storage Solutions India Pvt.	Worked in the manageability team which is responsible for enabling the various components in the software stack to communicate with each other. I worked on mainly three different projects over the course of 5 months. First one was notifications for long standing user initiated tasks. The second one concerned with alerting system for tenants on a multi-tenant cluster which formed a part of the ongoing multitenancy project. The third one was internationalising alert messages and alert email notifications starting with the Japanese language. All these projects were concerned with mainline product development. Tool used (Development tools - H/w, S/w): IDEs, Open Source Software, Hypervisors Objectives of the project: Mainline Product Development Major Learning Outcomes: Agile Software Development; Distributed software design and development Brief Description of working environment, expectations from the company: Working environment is extremely developer friendly. Academic courses relevant to the project: Design and Analysis of Algorithms, Operating Systems, Networks, Distributed Systems Student Name: Nimish Jain (2015B3PS0507G)	2018- 19- sem1
Credit Risk DBOI	Credit rating analysis for counterparties in emerging markets. Spreading of financials is done once we receive the annual and interim financial statements for both public and private counterparties. Analysis of subsidiaries is done based on their relevance, limits assigned to them or if DB has exposure. Team also looks at any rating events such as mergers and acquisitions, share price movement, management change etc. Prepared a presentation on Trade war which was then a topic of current relevance. Also did Credit Ratings for different countries. Tool used (Development tools - H/w, S/w): BARS, Excel, Internal Softwares Objectives of the project: To prepare Credit Ratings Report Major Learning Outcomes: Financial Analysis, knowledge about world economy and financial markets Brief Description of working environment, expectations from the company: Being a global bank DBOI works in coordination with its US and German counterparts, Reports are sent to DB credit officers worldwide. Team mates are cooperative and ready to help you out. Academic courses relevant to the project: FOFA, Fin-man	2018- 19- sem1
Credit Suisse	I was allotted Stock Loan team which is an integral part of Prime Services division. Securities lending or stock lending refers to the lending of securities by one party to another. The terms of the loan will be governed by a "Securities Lending Agreement which requires that the borrower provides the lender with collateral, in the form of cash or non-cash securities, of value equal to or greater than the loaned securities plus agreed upon margin. Key lenders of securities include mutual funds, insurance companies, pension plans and other large investment portfolios. Most securities loans are collateralized, either with other securities or with cash deposits. Where lenders take securities as collateral, they are paid a fee by the borrower. By contrast, where they are given cash as collateral, they pay the borrower interest but at a rate (the rebate rate) that is lower than market rates, so that they can reinvest the cash and make a return. Pricing is negotiated between the parties and would typically take into account factors such as supply and demand for the particular securities, collateral flexibility, the size of any manufactured dividend and the likelihood of the lender recalling the securities early. As well as securities lending, sale and repurchase (repo) and buysell back transactions are used for the temporary transfer of securities against cash. My key responsibilities include: Monitoring PB Short Sales and Short Interest to assist traders in devising and optimizing trading strategies. Run various analytical process over varied securities and markets to identify possible Short Squeezes and hence inform the traders regarding the same. Inventory optimization to reduce borrowing cost by flipping the inventory internally across various available books and desk against borrowing it from the street and hence directly improving the PnL for the team. Analyzing and identifying the refinancing opportunity on various securities and hence reducing the borrowing cost by informing the traders of the same and thus as	2018- 19- sem1

Experience Year Company Credit Risk is the potential risk that a bank borrower or a counterparty will fail to meet its obligations according to the terms set prior to the transaction. My work dealt with the exposure movement analysis for OTC products such as swaps, US Treasury Bills, Swaptions and FRA . As a part of my internship at Credit Suisse I had to Perform weekly/monthly /daily exposure movement analysis for the counterparties received according to their movement in RWA. I had to ensure that all post-calculation data is received on time and meets acceptable data quality standards and that all exceptions in the reports are addressed and managed. Tool used (Development tools - H/w, S/w): MSSL, MS Excel Objectives of the project: To anlayse the movement in exposure for OTC products Major Learning Outcomes: Credit Suisse has helped me grow in my own eyes as a person. I have improved on my personal skills, work ethic, while also gaining a first hand experience of the banking domain. I learnt how investment banks work and how these trade deals are looked at on a daily basis to ensure that the bank faces no risk of bankruptcy . I also gained an in depth 2018view of the models used to calculate exposure and validating the Mark-to-market,-collateral and notional Credit Suisse 19for various derivatives. Brief Description of working environment, expectations from the company: Credit sem1 Suisse has helped me grow in my own eyes as a person. I have improved on my personal skills, work ethic, while also gaining a first hand experience of the banking domain. The first thing, I would like to mention is the work culture, everyone at Credit Suisse is very helpful and supportive. They are with you at every step and try their best to teach you all that you wish to. Apart from learning at work, Credit Suisse also organised various interesting activities for us. They organised speaker sessions for us, sessions to interact with the HR representatives and learn more about one another, volunteering activities etc. Through the intern connect session we also got to meet various directors of different departments on a first hand basis. This helped us connect with them and understand the workings of various departments. At the volunteering session we helped paint the classroom of students form underprivileged backgrounds. This instilled us with motivation and enthusiasm towards contributing in the society. Academic courses relevant to the project: FRAM, DRM Name: Suyash Sharma (2015A5PS090P) I ensured accuracy of risk positions and sensitivities of portfolios through position and trade move analysis, impact of market moves on trades, impact of product behavior like equities, bonds, options and swaps on sensitivities like delta, gamma, credit spread, interest, and foreign exchange rate movements among other approaches. I was involved in the extraction of data and sanity checks using queries on SQL. I calculated impact for the trades based on baseline mark to market value and scenario value. I validate it with the help of sensitivity based calculator and Scenario Manager with underlying factors. I also attend to ad-hoc queries for in-depth analysis of trade moves using different in built risk system and software of Credit Suisse. Tool used (Development tools - H/w, S/w): Microsoft Excel, SQL, R Studio Objectives of the project: 2018-Credit Suisse Internal Credit Limit Monitoring and Regulatory Reporting Major Learning Outcomes: Advance Excel, R 19-Programming, Credit Risk Analysis, Stakeholder Management Brief Description of working environment, sem1 expectations from the company: As a first major Internship experience, Credit Suisse has a lot to offer to learn and showcase one's skills. The company allows an individual to grow professionally and personally. It gives a lot of exposure in terms of accountability and stakeholder management. It also depends on one's will to learn and contribute to the firm within the short span and also the kind of project and team that you get to work along. The working environment is very healthy and team members are very cooperative. Academic courses relevant to the project: Derivatives and Risk Management, Financial Risk Analysis and Management, Security Analysis and Portfolio Management Name: Charul Passey (2015A1PS0774P) Division: RFDAR (Risk and Finance Data Analytics and Reporting). The project was based on regulatory reporting and Basel measurement, with RWA calculation specifically. This required an in depth knowledge of the varied factors contributing to Capital Adequacy Ratio calculations such as trade maturity, counterparty rating, AVCM (Asset Value Correlation Multiplier) and transaction rating. Any of the exceptions captured in the above data were resolved on a need basis and in conjunction with Credit Risk Management, Product Control and respective source data teams (for loan products, OTC derivatives, etc.). All of the above is a part of Risk Analysis ad Data Management. Tool used (Development tools - H/w, S/w): R programming, PL-SQL, MS Excel, VBA Objectives of the project: Daily/Weekly/Monthly exception reports 2018-**Credit Suisse** to be published with Basel Measurement And Regulatory Reporting Major Learning Outcomes: Firm 19specific technical skills Soft skills Regulatory reporting theories and applications Capital adequacy sem1 calculations Brief Description of working environment, expectations from the company: Can't complain. Work culture and work-life balance is amongst the best you could find in a PS station, specifically for interns. Although you might have to struggle a while to get work. Better to not hesitate and not wait for colleagues to come to you. Grasp as much work as early as you can, and keep in contact with your stakeholder teams. Networking is the key. Academic courses relevant to the project: Financial Risk Analytics and Management, Derivatives and Risk Management, Security Analysis and Portfolio Management Faculty Name: Dr. B.V. Prasad Student Name: Shreyas Hejib

Company	Experience	Year
Credit Suisse - Credit Analytics , Mumbai	I was a part of the Firm Wide Stress Testing team which is responsible for developing and enhancing current stress testing framework and methodology that complies with model governance framework for Investment Banking and Private Banking portfolios. The team analyzes the overall counterparty credit risk / exposure of the bank for various scenarios for CCAR, FINMA, PRA and reports US, Swiss and UK regulators. I worked on the stressed Probability of Default (PD) and stressed Loss Given Default (LGD) Models used in calculating the expected losses for the bank in stressed economic periods. Tool used (Development tools - H/w, S/w): RStudio, Excel with VBA Objectives of the project: irm Wide Stress Testing using Stressed Probability of Default Model and Loss Given Default (LGD) Model Major Learning Outcomes: Nuances of statistical modeling, model testing, credit data analytics Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment in Credit Suisse overall has been really nice and amicable. Everyone is very friendly. You are expected to complete the work you are allotted, on time; either by coming early and going early or by coming late and staying till late. Each colleague would be willing to go out of the way and help you if you are stuck with something. Academic courses relevant to the project: Prob stats, Mathematical and statistical methods, Econometrics, Advanced Econometrics Student	2019- 20- sem1
Credit Suisse - Equity Research , Mumbai	Major internship project was MSCI India Index Additions and deletions which is major part of market liquidity. Some other really good projects I worked on are Mutual Funds and ETFs data tracking which I will be covering in reports further. Two small VBA Projects to automate few excel tasks. And some small tasks to observe various economic aspects and how they affect stock market. Tool used (Development tools - H/w, S/w): Ms Excel, VBA, Bloomberg Objectives of the project: To understand and predict the movement of stocks with various incidents happening in the market. To be ahead of the curve. Major Learning Outcomes: VBA, Bloomberg software, working environment of a trading floor, how to think in direction to get benefit from different situations. Details of Papers/patents: Brief Description of working environment, expectations from the company: Just Wow! Credit suisse is really a great to firm to work. I was lucky enough to get the exposure of real time trading and how IPO, QIP or various things really process. People are really nice, can approach anyone for even small things. Academic courses relevant to the project: DRM, SAPM	2019- 20- sem1
Credit Suisse - Equity Research , Mumbai	Analysis and investor presentation preparation of companies which have been selected according to their potential growth. The first step involves collection of data. This is done via the help of the Draft Red Herring Proposal (DRHP) and the annual reports. The three financial statements which are the Balance Sheet, the Profit and Loss statement and the Statement of Cash Flows are collected from these reports. From there, they are meticulously recorded in an excel sheet. The next step involves building a financial model. By linking the various accounts in the aforementioned financial statements which are on separate excel sheets, we create a model which keeps the Balance Sheet properly balanced regardless of any change of accounts which may take place in any of the financial statements. Tool used (Development tools - H/w, S/w): Microsoft Excel, PowerPoint Objectives of the project: To develop financial reports regarding companies. Major Learning Outcomes: 1) Linking financial statements together 2) Understanding the complexities and nuances in financial analysis 3) Building and utilizing financial models for analysis Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Fundamentals of Finance, Financial Management etc. Student	2019- 20- sem1
Credit Suisse - Global Market Risk Management , Mumbai	Automated the steps in the model involving machine learning and statistics to chose a final model to project VaR/SVaR forward nine quarters. This is done due to regulatory purposes to forecast amount of capital required for the company to keep aside and do well even during stress periods. Tool used (Development tools - H/w, S/w): Macros, VBA, Python, R, Excel Objectives of the project: To automate the steps involved in running a model to project VaR/SVaR Major Learning Outcomes: Learned about finance in real life and how corporate banks work. Improved upon my coding skills and implementation of my learnings in practical life. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DRM, FRAM, FM, FOFA Student	2019- 20- sem1
Credit Suisse - Prime Services , Mumbai	Was a part of Client and Business Analytics team. Work included making daily and weekly reports about the various aspects of the business the clients do with Credit Suisse. The entire analysis was in a broader perspective like revenues, balances and few other metrics. Tool used (Development tools - H/w, S/w): Excel, VBA and Tableau Objectives of the project: Major Learning Outcomes: Understanding about Prime Brokerage business and how revenues are generated for Credit Suisse. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DRM Mumbai Student	2019- 20- sem1

Company	Experience	Year
Credit Suisse - Risk & Finance Data Analytics, Reporting ,	My work revolved around stress testing. It is a computer-simulated technique to analyze how banks and investment portfolios fare in drastic economic scenarios. It helps gauge investment risk and the adequacy of assets, as well as to help evaluate internal processes and controls. We were required to determine drivers of the move and validate them so that the hedging strategies can be determined accordingly. Tool used (Development tools - H/w, S/w): Qlik Sense, Excel, VBA, SQL Objectives of the project: 1. To monitor trading desk limits 2. To perform impact analysis on bank's assets. 3. To create a dashboard on Qlik Sense for quick and in-depth risk monitoring Major Learning Outcomes: Credit and Market Risk Management, Qlik sense Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Derivatives and Risk Management, Financial Engineering Pune Student	2019- 20- sem1
Credit Suisse - Risk & Finance Data Analytics, Reporting ,	I was a part of the RFDAR( Risk and Finance Data Analytics and Reporting) department of the Chief Risk Office in Pune. I was a part of the stress testing team in RFDAR, our primary work was to measure and manage credit risk of CS against various counterparties for pre-defined adverse scenarios. This was done by applying shocks defined for these scenarios to the baseline mark to market values and assessing the movements for limit breaches in exposure limits. The stressed mark to market values are adjusted for regulatory reporting. Tool used (Development tools - H/w, S/w): Excel, SQL Objectives of the project: Credit risk analysis of products for regulatory reporting Major Learning Outcomes: Conceptual understanding of valuation of financial instruments, valuation of collateral, stress testing methodologies. Details of Papers/patents: Brief Description of working environment, expectations from the company: Excellent working environment with emphasis on teamwork and open dialogue. Expect risk measurement projects for various financial products. Academic courses relevant to the project: Derivatives and Risk Management, Financial Management, Security Analysis and Portfolio Management Student	2019- 20- sem1
Credit Suisse- Finance Change , Pune	Reporting related UATs performed, basically it's finding failures and get it fixed with IT team Tool used (Development tools - H/w, S/w): Axiom, Oracle business intelligence, excel, jupyter, spyder Objectives of the project: Pillar 3 report Major Learning Outcomes: BASEL reporting Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: SAPM, fundafin and DRM Student	2019- 20- sem1
Credit Suisse, Mumbai	I am a member of the Delta One team. The mandate of my team is to provide ease of access and execution to our clients in markets which they are interested to invest in. We offer index returns through swaps using a variety of hedges through futures, ETFs and stocks. Since an index (eg. S&P 500) is dynamic in nature with its composition changing over the course of time as per a fixed methodology, my task was to understand how a change would impact the current composition of an index and implement the new composition by trading in the market. Also, forecasting the changes before they occur provides an opportunity to play the rebalance early and create additional profit (or loss). This process of forecasting involves deep understanding of various index methodologies along with historical, fundamental and technical analysis of the securities being added or deleted. Also, when trading in index futures, calculation of their fair value is pivotal. This involves forecasting dividends of the firms in a particular index on which the future is created. The aim is to predict the amount of free cash flow a firm would generate and what part of it would be allocated as returns to shareholders in the form of dividends using historical patterns, management guidance and fundamental analysis. The closer our analysis is to the actual dividend paid, the more accurate our fair value calculation will be and thus providing us profitable positions. Tool used (Development tools - H/w, S/w): MS Excel, VBA, Bloomberg Terminal, Thomson Reuters Objectives of the project: 1. Understanding index methodologies and rebalancing indices. 2. Forecasting dividends of US firms accurately to achieve fair valuation of futures. Major Learning Outcomes: 1. In-depth understanding of index construction methodologies and treatment of various corporate actions. 2. Becoming skilled at using fundamental analysis. 3. Exposure to trading and hedging strategies. Academic courses relevant to the project: Business Analysis and Valuation, Derivatives and Risk Manage	2018- 19- sem1
Credit Suisse, Mumbai	Majority of the work involved assisting the ICRA team in quarterly submission and automation of the process involved. The first couple of months were spent in understanding the functionalities of the automation tool. Simultaneously, the quarterly submissions were worked upon. A better and in-depth understanding of risk would have made the experience more enriching. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: To understand the processes of Integrated Capital Risk Analysis(ICRA) and Building Block Analysis(BBA) submission to Swiss regulator, FINMA Major Learning Outcomes: Understanding procedures and needs of reporting Brief Description of working environment, expectations from the company: The work culture is great! Teammates and colleagues are friendly and willing to help. The working hours are also flexible, with strong emphasis on work-life balance. Academic courses relevant to the project: Derivatives & Risk Management Name: Tarun Kataria (2015B3TS0966P)	2018- 19- sem1

Company Experience Year

In banking and finance, there are some regulatory requirements which are being put by different regulators of different regions and countries to carry out business and operations in that particular region and country. CCAR is also a requirement which needs to be carried out by Financial Institutions like Investment Banks annually. A part of CCAR cycle is that for Corporates and Financial Institutions' stressed period Probability of Defaults are needed to projected for different scenarios (macroeconomic conditions). The outputs of the model are monitored and back tested for a particular periods. It is very crucial for a model to pass all the statistical tests and back-testing checks. Model Monitoring has four main components. The components being: • Back testing • Robustness • Sensitivity to Key Model Assumptions • Representativeness The model determines the extent up to which Credit Suisse can hold up the capital requirements to absorb the economic shocks and lot of defaults happen. The PDs, upgrade rate, downgrade rate, migrations etc. gives the idea about the performance of the counter-parties and, hence the requirement of the bank accordingly. Before going further into the monitoring, first it is very important to give a glance about the model itself. It is very important to understand the model to do its monitoring and then do some methodological experiments. The basic understanding of the model is required to do the mentioned above. The essence of the model is the one parameter representation of credit ratings transition matrices. Tool used (Development tools - H/w, S/w): R Studio, MS Excel Objectives of the project: Statistical Monitoring & Methodological Analysis of Probability of Defaults Model Major Learning Outcomes: Mathematical & Statistical Modelling Academic courses relevant to the project: Prob & Stats, Econometrics Name: Shivani Neema (2015A8PS0480G) Tool used (Development tools - H/w, S/w): On the analytical side of skills, Microsoft Excel, MySql and R Programming helps you a lot, particularly a good command on the MS Excel. Objectives of the project: I learnt that Economic Risk Capital is very important, especially in Credit Suisse. Many banks do not consider it but it has a very significance role. Major Learning Outcomes: As a part of my learnings at Credit Suisse, I gained new appreciation for teamwork and collaboration. I have improved on my personal skills, work ethic, and leadership spirit while also gaining a first hand experience in the banking domain. I learnt a lot about punctuality, sincerity and dedication towards work. Collaborating with so many different teams was a fun and challenging experience. I learnt how investment banks work and how the trade deals are looked at on a daily basis to ensure that the bank faces no risk of bankruptcy. I gained an in-depth view of the models used to calculate

Economic Risk Capital, also the systems used to calculate it such as Mars and Adapt. Academic courses

relevant to the project: Financial Management Name: Mayur Bajaj (2014B2A40971H)

Credit Suisse, Mumbai

Company Experience Year

Global Markets Controls is a support function that has been devised in the organisation to overlook day to day operations of the business. After the 2008 financial crisis, BASEL committee of Banking devised the framework for the In-house assessment of the processes and it was made compulsory for he firms to conduct in-house assessment for their process. This assessment are shared with the regulators quarterly and are reviewed by the senior managers/Chief Operating Officers (COOs) in different frequency intervals in the forums like BRCMs(Business risk controls meetings) and GMCC (Global Market Control Committee). The projects in GM Controls revolve around the Reporting tools and Dashboards to ensure the business is compliant and also informed of the errors occurring during the duration of assessment. The Key Risk Indicators (KRI) have been defined on the basis of the process to monitor the risk occurring due to People, Process or System. These KRI are also called Metrics for daily Processing. In Governance & Reporting, These KRI's are reported in various platforms depending on the Risk of the Business. The details of few key projects are as follow: 1) Governance MI – A group of 36 metrics have been determined and agreed by the businesses to reflect the Operation Risk of the Business. These metrics are divided into 4 different pillars-Conduct, Operations, Behaviour and Control Environment. Governance MI is reported monthly. The data for this MI is sourced from various sources. It is then analysed and Reconciled into a dashboard which give a complete view of the Metrics for particular Business for the Month of analysis. This MI is reflected in all the Business specific BRCMs and the group level GMCC. Governance MI gives the Month-on-Month view for the metrics and the RAG status for the same, Re for the Breach, Amber for nearing Breach and Green for being in control. These RAG is determined based on pre-defined thresholds which are changed half Yearly on 12 months moving average. 2) APAC DASHBOARD – It is a group specific dashboard where all the Metrics associated with the Asia Pacific group are reported in single window. This is an extensive dashboard consisting of 142 BRCM Metrics and 111 ORCC metrics. This gives a trend view for all the metrics for all the APAC business, being able to view three months view in the dashboard. Also giving the RAG for the metrics similar to Governance MI. 3) BRCMs and GMCC - The performance of a business is analysed and monitored monthly, and discussed in these monthly meetings. These Business Risk Controls meetings are organised by the Business COOs to discuss business performance. All the aspects of business are discussed in these meetings to insure that the business is running smooth, and to rectify all misdoings that has happened/ might occur. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: Monthly

assessment and Report generation for Business Operation Risk Major Learning Outcomes: Networking is very important and Importance of Operation Risk Academic courses relevant to the project: Quality

Control Assurance & Reliability Name: Abhinash Kashyap Borah (2014B3A80546G)

Credit Suisse, Mumbai

2018-

19-

Company Experience Year

I competed 3 major assignments and also handled BAU tasks of the team. The objective of the first assignment was to automate the Divisional and Legal Entity split of Potential Exposure (PE) Impact due to Overrides. (The overrides are a list of complex trades of certain counter-parties whose exposure profiles through the usual calculation procedure do not reflect the true economic value; hence manual calculation is done). This is achieved by splitting the PE by taking into consideration the Mark to Market (MtM) and Standardised Approach - Counterparty Credit Risk (SA-CCR) Potential Future Exposure (PFE) numbers. The business outcome of this assignment was that it saved around 6 business hours monthly. Also the control checks put in place ensured that operational errors are registered and rectified. The second assignment involved automating the exposure calculation process involved in maintaining a specific override. The process involved calculation of Exposure Exposure (EE) and Potential Exposure (PE) by the shortcut formula. It also involves Calibration of Inflation, Interest Rate and Mortality Rate for PE and EE VaR calculation which is used in PE and EE calculation. Additionally sourcing of Inflation and Interest Rate sensitivities for PE and EE VaR calculation was also done. The third assignment involved building a tool for control check of PE and EE profiles for Overrides. It basically compares the PE and EE profiles of the overridden counterparties of two environments to register any mismatch and to ensure whether they are due to overriding of profiles by override owner or due to improper flow of PE and EE profiles. profile. Tool used (Development tools - H/w, S/w): Excel, VBA, SQL, Internal Software's/Applications. Objectives of the project: Exposure Calculation Methodology Major Learning Outcomes: The BAU of my team was to generate Potential Exposure, PE and Expected Exposure, EE numbers, both unstressed and stressed for the front office (FO). This enhanced my knowledge of trades (Swaps, Options, Forwards, Swaptions, Caps/Floors). Also working on the automation assignments enhanced my knowledge of VBA, Excel and many internal softwares/applications. Brief Description of working environment, expectations from the company: The team members were quite helpful and provided sufficient quidance. The work environment is quite good. I was treated as an integral part of the team and included in the BAU tasks and other assignments of the team. It gives you a feel of the corporate world and culture which I can assure you is very different from what we are accustomed to, in our college. Also interacting with seniors of the team, especially senior BITSians, helps a lot in understanding how to handle this change and not be overwhelmed by it. There were guest lectures for us interns by experienced bankers in Credit Suisse in high positions from across the globe which were very inspiring and enlightening. Academic courses relevant to the

Credit Suisse, Mumbai

2018-19sem1

Credit Suisse, Mumbai

The work was primarily based on analysis of operational risk in the bank under various themes and using various metrics. After analysis part, reporting is done to appropriate governance forums which includes senior management of the bank. These reports contain different themes of the operational risk of the bank and focusses on various processes which are monitered within the bank. Tool used (Development tools - H/w, S/w): Microsoft Excel, VBA Objectives of the project: Automation of existing processes and analysis & reporting of operational risks from Controls perspective. Major Learning Outcomes: Working at Credit Suisse gave me the required exposure to the banking industry that was necessary along with the practical knowledge of the processes and workings inside the bank. Along with learning the interconnection between various sections of bank that work hand-in-hand and the interdependency of various departments and the various support functions that are necessary to make sure the bank is functioning properly. Along with the financial knowledge, I have also gained some experience with Microsoft Excel and VBA. Almost all the work in the department is done on Microsoft Excel and VBA is necessary for automation purposes of the processes that are generally carried out in Microsoft Excel. Brief Description of working environment, expectations from the company: The working environment in the department Global Market Controls is very relaxed, flexible and learning friendly. Being an engineering graduates, the department provides a very good exposure to the banking industry. The processes carried out in the department are related to Operational Risk domain. The working hours are also flexible and overall environment in the department is very supportive and cooperative. Academic courses relevant to the project: FOFA, FM, SAPM

project: Basic knowledge of Finance like Derivatives, Risks which are covered in DRM and FRAM

respectively. Name: Parth Simwal (20140656)

2018-19sem1

Company	Experience	Year
Credit Suisse, Product Control, Pune	Using recovery rates from two sources, Independent Price Verification is done for Credit Default Swaps. My work involves obtaining the recovery rates from two sources namely Front Office and Benchmark source. Impact is calculated as the product of the difference of the recovery rates from the two sources and delta. Delta is change in PV for 1% change in underlying. Impact is required to be adjusted to books and records for the month being tested. After the Impacts are generated, check for book completeness is done and reviewed by the manager. Upon resolving all the tweaks, results are sent to the Singapore team. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: Automation of data extraction to the tool using Excel VBA. Major Learning Outcomes: Credit Default Swaps, different risks associated with them. Microsoft Excel and VBA. Brief Description of working environment, expectations from the company: Every new employee / intern is assigned a buddy from the team to help him in getting acquainted to the work environment and team. This is really helpful, especially for those working for the first time. Every member in the team is supportive. One is expected to have basic Excel knowledge and grasp the work as fast as possible to meet deadlines with ease. Every team member including interns is expected to stay over time when work load is more. Academic courses relevant to the project: Derivatives and Risk Management Analytics and Reporting	2018- 19- sem1
Credit Suisse, Risk and Finance Data	Preparing reports to be sent directly to the senior management, analyzing day on fat changes and providing commentaries, otpimizing the report Tool used (Development tools - H/w, S/w): Excel and propriety company software Objectives of the project: Daily risk reporting for Asia Pacific Major Learning Outcomes: Working against deadlines, teamwork, understanding financial terms Brief Description of working environment, expectations from the company: Very nice. Excellent working hours. Everyone treats you like an employee. Academic courses relevant to the project: Derivatives and risk management Institute, Chennai Tool used (Development tools - H/w, S/w): UV Spectrophotometer, Homogenizer Objectives of the project: To prepare a collagen based scaffold for wound healing Major Learning Outcomes: Hands on experience on lab equipment Student Name: Vyankatesh Marathe	2018- 19- sem1
CSR, Bangalore	I am currently pursuing my PS-II in CSR, Qualcomm Company which is a pioneer in Bluetooth chip manufacturing. The project I am working in my PS-II is "Automation of PTS testing on Bluetooth chips" which requires me to automate the testing procedures of P.T.S (lie tuning suite) performed on a Bluetooth chip manually. The project gave me a great scope to learn about overall functioning and internal stack structures of Bluetooth chips. Apart from that my project demands coding in python, so I got myself well versed with the python and also coding. I have to work on various Bluetooth devices with different utilities to test them and understand them thoroughly. During the course of Practice school, I got to work in a project which requires a lot of coordination from other team members. my team members helped me a lot in these issues. I got to know how a real time working environment looks like in a multinational company. Moreover during my PS the company CSR got acquired by Qualcomm by which I got to see how prospects and culture of a company change when there is an acquisition by a giant company. I got lucky to experience two work cultures at same time. I learnt how a real time working experience is and how a team needs to plan and work in coordination to achieve the goals. I have also learnt how a team is led by team manager who decides the goals and also the means to achieve them. As I have mentioned this project has helped me to understand the how a Bluetooth chip functions and relate to the fundamental concepts I have learnt in my academics. It helped me to learn python programming which I was not well acquainted with earlier and also helped me brush up my coding skills. The Practice school has taught me how I need to work in a team coordinating with them and also taught me how I need to keep learning and updating my knowledge base and apply them in work life rather than just acquiring bookish knowledge. I have made many god friends in my company who helped me with my project. By working on a project that is ve	2015- 16- sem1

Company Experience Year

months at office. The amount of knowledge acquired from the internet is vast and almost solved every troublesome aspect of the documents/books by the company. While there was limited material related to my project, the basics were still all there. PS-2 helps one to build their persona, knowledge base and interact with industry experts. The experience at PS-2 has made me aware of the current industry standard and situation and that adds to better chances at scoring/developing into a better essional at a workplace. The project I am currently working in my PS-II is "Automation of PTS testing on Bluetooth chips" which requires me to automate the testing procedures of P.T.S (ile tuning suite) performed on a Bluetooth chip manually. The project gave me a great scope to learn about overall functioning and internal stack structures of Bluetooth chips. Apart from that my project demands coding in python, so I got myself well versed with the python and also coding. I have to work on various Bluetooth devices with different utilities to test them and understand them thoroughly. K. Sai Madhav (2012AAPS114H) Discipline: ECE I had been allotted a project on, testing whether the codes (SYMPHONY, SYNERGY) abides by one of the protocols(DFS)set by the Wi-Fi alliance, this entire thing had been tested manually until now, there were some basic automation scripts written for (SYNERGY), I had modified and improved those scripts and checked whether it is functioning as expectedly for all the cases, which could now serve their needs. I had further made major changes in the code to accommodate the flow differences between the Symphony and Synergy. In my course spanning 5 ½ months, I had learnt some basics of Networking, some protocols of Wi-Fi especially the DFS protocol, apart from the above mentioned learning's, I had also covered all the basics and some advanced concepts in PERL, PYTHON, SHELL SCRIPTING. PERL being the toughest and widely used language gives me an edge over the others. Shell Scripting had helped me in getting familiar with Linux Terminal System administration tasks. I had learnt to keep into implementation, the concerned knowledge I gained from the college, and studied few more technicalities which are required for our project. During this period I had learnt about various fields (Protocols) the Industry will be working on, and the concepts and skills their work requires. Had a taste of how office environment and how it's work style will be. I had to work to reach up to the targets set for us by our manager (Working under stress). I got to acquire some new skills, which had given me a strong backing and confidence to enter into the competitive world. During the PS-II my interest in the field of Networks had further increased, which helped me to narrow down my career prospects to Communications, Networks and Software fields. Automation of the testing procedure, which I had done as a part of my project, can be used by the company from here onwards, which requires small changes with time, as these scripts are following protocols; much of a change in the script is not expected. This automation significantly decreases the testing procedure duration, which could be very useful to the Testing Team, in which they are keen on. Sagar Shah (2012A7PS051H) Discipline: Computer Science In terms of learning, the experience has been nothing short of terrific. The time spent at PS-2 has been a great teacher in various spheres, including but not limited to understanding corporate life, expert guidance, apprehending new technologies and their developments and building a essional character. In terms of academics, the training holds a lot of scope on a significant scale. One is expected to learn, work and develop on new technologies applying one's university education, which is, in itself, a mammoth task to achieve; so much that PS-1 appears to be a joke when compared to its senior and significant counterpart. For starters, it has made most of us early risers unlike the lazy slobs we were at college. Yes, academic experience is necessary, but the industry is a different ball game altogether; and PS-2 provides a perfect opportunity to learn and acknowledge the differences. It all boils down to deadlines and work, but challenges are interesting too. Employee experience is great; and it helps build the initial industry contact base for future prospects. Things taught in college are just not enough. The industry is working on feats that are a century ahead of what is taught as academics. Sure, the basics are still the same; but constant learning is not a myth- it's the very reality we exist in and PS-2 has just been a reminder of the same. Books, Internet and essional guidance; or expert advice – as you may call it. Recommended books by your team are a necessary read. The initial two weeks in the company are all study no play, but that is exactly what sets a tone for the next five months at office. (In my case, I gorged on Robin Heydon's "Bluetooth Low Energy"- borrowed it from the company library) Do not shy away from browsing the internet. The amount of knowledge base on the internet is beyond tremendous and almost every troublesome aspect of books is explained in the simplest of terms. While there was limited material related to my project, the basics were still all there. Finally, a human touch to all of it is necessary. Helpful mentors make the cut here, and almost all the seemingly unresolved questions find answers with these people. Etiquettes and essional personalities are rarely taught by books and internet. PS-2 helps one to build their persona, knowledge base and interact with industry experts. The experience at PS-2 - if not affect my future career prospects - has at least made me aware of the current industry standard and situation and that adds to better chances at scoring a workplace. I have successfully completed one project on template creation of automated generation of tests reducing the workload of testing BLE devices in the company by at least 90%. Also, my other project- Development of automation test framework for BLE devices- is nearing an end and will soon be employed for industry devices.

Company	Experience	Year
Cubical Laboratories , Delhi	I was given the work related to marketing and operations. In this I had done search engine optimization for the website, Google and Facebook ads, content writing etc. Apart from this I had developed tools for better distribution system and inventory management. Tools used (Development tools - H/w, S/w): Excel, Google Adwords, Facebook Business, etc. Objectives of the project: Improving brand presence and distribution network. Outcomes of the project: The page ranks of Cubical webpages have significantly improved making it more accessible to the audience. The distribution network has also improved, both in size and efficiency. Major Learning Outcomes: Search engine optimization, Social media marketing, key words based content. Brief Description of working environment, expectations from the company:The work environment was pretty average, with lack of proper administration and schedule. Though the individuals had a lot to offer in terms of their knowledge, the structure of the environment was a hindrance. The expectation of work was largely fair, with ample time and background understanding provided for the work to be done. This was the major learning experience, the work given by individuals.	2016- 17- sem1
Cubical Laboratories , Delhi	The project was about developing new business channels for the company. The process included citing assumptions about a new business channel, testing out the assumptions and changing the assumption if the results didn't seem to justify the assumptions made in the first place. And, if the assumptions did prove to be right, other team members were also allocated to the same task to work on the same thing and increase the efficiency and the number of shots we gave at a particular business channel, so that we can increase the success rate. Tools used (Development tools - H/W, S/W): Data management softwares- MS Excel, Postman, MS Powerpoint Objectives of the project: Develop new channels for procuring business for the company. As well as Increasing the efficiency of the existing processes and bringing business for the company. Outcomes of the project: The project contributed 35 lakhs to the company's revenue and increased the revenue by 15%. I was also responsible for managing client relationships. I realized that getting a client on board for business is slightly easier as compared to keeping the client on board. Apart from that, i found a new way of collecting data from just dial and indiamart website. The details were mostly about our possible business partners. I improved the efficiency of the data extraction process by 2400%. I was also responsible for managing the entire database of interested customers which improved my data management skills and i also explored the various uses of excel. Major Learning Outcomes: The major learning happened in terms of the soft skills developed through the time. I have sat in a lot of presentations and have presented the solution to a lot of prospective business clients and customers. I also was cold calling about 10-13 people per day. Doing this, i could overcome my fear and uneasiness talking to unknown people over the phone. Pitching the business plan over the phone, made me confident of my talking skills. I could formally talk to people and interest them in my pitch and	2016- 17- sem1
Cubical Laboratories, Delhi	I was given the work related to marketing and operations. In this, I had to do search engine optimization for the website, Google and Facebook ads, content writing etc. Apart from this, I developed tools for better distribution system and inventory management. Tools used (Development tools - H/w, S/w): Excel, Google Adwords, Facebook Business, etc. Objectives of the project: Improving brand presence and distribution network. Outcomes of the project: The page ranks of Cubical webpages have significantly improved making it more accessible to the audience. The distribution network has also improved, both in size and efficiency. Major Learning Outcomes: Search engine optimization, Social media marketing, and key words based content writing. Brief Description of working environment, expectations from the company: The working environment was pretty average, with lack of proper administration and schedule. Though the individuals had a lot to offer in terms of their knowledge, the structure of the environment was a hindrance. The expectation of work was quite fair, with ample time and background understanding provided for the work to be done.	2016- 17- sem1

Experience Year Company The project was about developing new business channels for the company. The process included citing assumptions about a new business channel, testing out the assumptions and changing the assumption if the results didn't seem to justify the assumptions made in the first place. And, if the assumptions did prove to be right, other team members were also allocated to the same task to work on the same thing to increase the efficiency and the number of shots we gave at a particular business channel, so that we could increase the success rate. Tools used (Development tools - H/w, S/w): Data management softwares- MS Excel, Postman, MS PowerPoint Objectives of the project: To develop new channels for procuring business for the company as well as to increase the efficiency of the existing processes. Outcomes of the project: The project contributed 35 lakhs to the company's revenue and increased the revenue by 15%. I was also responsible for managing client relationships. 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I could formally talk to people and keep their interest in my pitch over the duration of the call. It also made me very formal in my people skills in contrast to my informal attitude during my college days. I feel like I have achieved something and it gives me immense confidence going for on-campus placements. I have also improved my MS excel and MS power point skills. I am much better now in making a presentation than I was before. I can grasp things much more quickly and talk to people in a confident manner. Brief Description of working environment, expectations from the company: I was quite disappointed with the environment of the company. I had expected a much more passionate environment where everyone is working for the company keeping aside their personal grudges and interests. Being in a startup, I expected to be given a lot of tasks in many departments, but I was restricted to working in only one department. The people were very egoistic and had no vision as to what they were working for.Also, they behaved rather childishly when asked questions about the products and the standard reaction was of mocking the person who was asking the questions. A new manager was appointed who was a bully. He used aggression to get work out of people. I opposed his behavior in-front of all the people in the office. The company is doing great business but the management lacks cooperationand coordination. Student I worked at DataMintelligence which is a market research company as a research associate. We prepare reports on various niche market and estimate market size of those markets and their subsegments. We also do the detailed analysis of market segments and geographical analysis. We study the competitive scenario of the market and analyse competitive strategies adopted by major companies in the market. Tool 2018-DataM Intelligence 4market used (Development tools - H/w, S/w): MS Office, Factiva, Statista Objectives of the project: Detailed 19research Market Research Major Learning Outcomes: Improved understanding of various intricacies regarding sem1 doing market research. Brief Description of working environment, expectations from the company: Friendly working environment. Not overly hierarchical, A Startup company Name: JAYANT AGARWAL (2015D2TS0993P) I worked in the Sales & Marketing team and was responsible for generating the revenue with lead generation from outbound marketing, e-mail marketing and social media marketing. Tool used (Development tools - H/w, S/w): LinkedIn sales navigator, Mail Tester.com, G-Mass, Goggle Adwords Objectives of the project: Increase the revenue of the organization Major Learning Outcomes: Digital 2018-DataM Intelligence 4market marketing, Outbound marketing, Inbound marketing, E-mail marketing, Social media marketing Brief 19research Description of working environment, expectations from the company: It's a very young startup and allows sem1 you to harness your skills to brainstorm. The working environment is very friendly and helpful in all manners. Academic courses relevant to the project: Principle of Management, Market research, Print & Audio Visual Advertising, Creative Writing Name: Jayant Agarwal (2015D2PS0993P)

Company	Experience	Year
DataM Intelligence 4market research	I worked with Sales & Marketing team and was responsible for generating leads keeping the customer persona in view. I also handled the social media activities on LinkedIn, Twitter, and other social media channels. Tool used (Development tools - H/w, S/w): LinkedIn Sales Navigator, Hunter.io, Lead411, G-Suite Objectives of the project: Pitching of market research reports across different verticals and generating the revenue with lead generation from outbound marketing, e-mail marketing & social media marketing. Major Learning Outcomes: Encountered with new tools, Digital marketing, Outbound marketing, E-mail marketing, Social media marketing. Brief Description of working environment, expectations from the company: The Company provided a great working environment with all the required things. Academic courses relevant to the project: Principle of Management, Marketing research, Print & Audio Visual Advertising, Business Communication Name: Varnita yadav (2015D2TS0988P)	2018- 19- sem1
DataM Intelligence 4market research	lead generation on different title in 32 domain of market, social media marketing, cold calling and e-mail marketing which was part of outbound marketing. Tool used (Development tools - H/w, S/w): LinkedInsales navigator, lead411, mail tester, hunter, find era all used in lead generation process. Ms excel, java scripts Objectives of the project: Generating Revenue with Lead Generation from the Outbound Marketing, E-mail Marketing & Social Media Marketing Major Learning Outcomes: understanding of tools and types of marketing BITS Pilani, Pilani Campus	2018- 19- sem1
DataM Intelligene 4Market research , Hyderabad	Taking leads has been my task everyday a list of 40 companies,1 market and sale of the market which is none of other than taking conversion has been my work during my PS2. Tool used (Development tools - H/w, S/w): Mail tester,hunter,zero bounce Objectives of the project: To bring main aspects of a business, to bring discussion opinion is the main objective Major Learning Outcomes: The main outcome to enhance competitivenessacross different geographies in their respective industry domain. Details of Papers/patents: Brief Description of working environment, expectations from the company: The environment at my company is quite encouraging and quite good. Academic courses relevant to the project: Student	2019- 20- sem1
DBOI - Business Finance , Mumbai	My daily task was to report front office P&L and risk for the portfolios assigned to me on T+1 basis. I also had to ensure that each and every trade has been booked correctly and if not, then rectify it by myself or get it rectified by liaising it with trader/ trader assistant / other teams involved. Apart from that, we also had to resolve cash breaks in the portfolios assigned to us. Tool used (Development tools - H/w, S/w): Internal Softwares of the company Objectives of the project: PnL & Risk Reporting Major Learning Outcomes: 1. PnL & Risk reporting 2. Financial Products Knowledge Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is really good. Everybody help each other whenever needs to be. Academic courses relevant to the project: DRM Student	2019- 20- sem1
DBOI - Market Risk Analysis & Control , Mumbai	I worked for the Credit Risk team in Risk Methodology department. I worked on producing monthly and quarterly reports to analyse the probability of default of clients and the distribution of clients across rating clients. I also worked on PD model development where we would choose the most suitable variables and apply them to determine the best fit model for calculating the probability of default of a client. Tool used (Development tools - H/w, S/w): SAS, MS EXCEL, POWERPOINT Objectives of the project: Determine PD of clients, examine functioning and validity of development model, develop best fit PD model, generate monthly/quarterly models Major Learning Outcomes: Learnt to work on SAS and advanced Excel. I also got a lot of exposure in terms of interaction with stake holders and senior executives. I got to present three reports in front of senior executives in Frankfurt and Berlin over video conference which was a Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment was great. The employees there are very kind and supportive in their behaviour. The transition from academics to a corporate environment is tough but exciting. There is a greater sense of routine and discipline is a highly appreciated trait. The employees also involved us in fun and sport activities after work hours. Academic courses relevant to the project: None as courses taught were relevant for market risk, while my work was in the domain of credit risk.	2019- 20- sem1
DBOI - Market Risk Analysis & Control , Mumbai	Assigned to Run The Bank - Change team. The team had periodic and non-periodic projects. I was the report owner of Stress Period Selection testing. Advanced Excel helps. Coding allowed me to automate some processes. Tool used (Development tools - H/w, S/w): Excel, R, SQL Dev Objectives of the project: Stress Period Selection Major Learning Outcomes: Project Management, Advanced Excel, Risk Management, Problem Solving and Stakeholder management Details of Papers/patents: - Brief Description of working environment, expectations from the company: - Academic courses relevant to the project: Derivatives and Risk Management Student	2019- 20- sem1

Company	Experience	Year
DBOI-Credit Risk	We did credit ratings for companies which we already lent money to. We need to track their cash usage annually. We kept track on major dealings company does with other companies and predict their outcomes for the company so we know if our money is used productively by them. The process of ratings starts with interpretation of financial statements and spreading it into the proprietary software as per our needs. We can compare the financials of the company with previous year financials in it which were already fed to the software in the past. Now, we need to look at the debt company holds and share of debt with DB. Keep track of repayments and liquidity needs. Then there was a specific template, guidelines and parameters to rate and write elaborately the justification and provide an outlook about the future. Rating all the parameters, system will automatically generate the final rating for the company. Parameters includes sustainability of earnings, growth of industry, working environment, country support, liquidity, cash flows, leverage metrics, management boards, transparency of reports, etc. After generating the reports, it goes for quality checks to portfolio managers, who point out errors and rectifies them with 3-4 checks and after a thorough checking, case gets approval in committee. This is annual reports but on quarterly basis, we keep track of earnings by writing risk tracker reports every quarter for each companies. Tool used (Development tools - H/w, S/w): Confidential proprietary software of Deutsche Bank Objectives of the project: Credit Rating of Leveraged Structured Corporates Major Learning Outcomes: Interpretation of financial statements and annual reports, Understanding Business Models of companies and the lending process of the bank. Brief Description of working environment, expectations from the company: The working environment was very professional, obviously as it was a bank. Analysts, managers and other colleagues were very jolly and helpful. There were many social interacting events, part	2018- 19- sem1
DBOI-Credit Risk	Credit analysis of the counterparties of the bank Tool used (Development tools - H/w, S/w): Excel and MS word Objectives of the project: To analyze the counterparty for credit risk Major Learning Outcomes: Understood analysis approach used by credit analyst Academic courses relevant to the project: Financial Management, Fundamental of Finance and Accounting, Derivative and Risk Management	2018- 19- sem1
DBOI, Mumbai	Market Data Strategy and Analytics team, a rechristening of the former team without the "Strategy" or "Analytics", has been formed for the major function of providing "quality" data for calculation of Value at Risk (VAR) and subsequently Economic Capital (EC). The major functions performed by the team, include, loading data from the feeds, cleaning of the data, remediation of stale of unusual data, validation of data, release of data into production for calculation of VaR, etc. With the new team being formed, additional functions like pre-emptive analysis of data to forecast VaR blow-ups, by the use of various Volatility comparison tools are to be performed. Tool used (Development tools - H/w, S/w): Excel, Access, SQL++, Python, Matlab Objectives of the project: Operations (Data Science/ ML) Major Learning Outcomes: SQL++, Python application to data science Brief Description of working environment, expectations from the company: Good company for beginning your career. Not a lot of growth as far as I can see in the organization. Bonuses are meager. Stipend is among the lowest of all finance PS2 stations. But, what makes the PS2 experience great here are the people. You will have fun time with your team. Work won't be as stressful as GC or MS, but dont expect to slack. You'll learn a LOT! The company doesn't expect you to have all the skills when you join in; rather you are trained and treated as one of their own. You will be given responsibilities far greater than you'd have experienced in any internship. Expect a solid 9 hours working. Cheers! Hope you come to DB. Academic courses relevant to the project: Derivatives and Risk Management, SAPM, Finman, Microeconomics Name: Sneha Shetgar (2015A1PS0685H)	2018- 19- sem1

Company	Experience	Year
DBOI, Mumbai	Data entry on financial statements, preparation of risk tracker, and finally rating cases. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Rating of companies Major Learning Outcomes: How ratings are important for a bank to calculate the probability of default. Brief Description of working environment, expectations from the company: Decent work environment, expect you to mingle extremely well. Academic courses relevant to the project: Fundamentals of finance and accounting, business analysis and valuation. Student Name: Tusharkanth Karlapudi Tool used (Development tools - H/w, S/w): PuTTy for SSH, C language coding, OS, Threads, JIRA, FFMPEG, Servers Objectives of the project: Create a library for capturing either a screenshot or a video of the server system and convert it to formats depending on user's request. Major Learning Outcomes: System design, OS coding, Project management, Library and API creation, Video conversion process, Firmware development, Servers, Project Optimization, Testing. Brief Description of working environment, expectations from the company: The work environment is very healthy with people around you being very friendly and ready to help. Even if you are an intern, you are given equal importance and included in the office activities. There's a lot to learn and with the employees here ready to help you with the learning process, it will be a great experience. An ideal place for someone who's interested in software engineering and firmware development. Academic courses relevant to the project: C programming, OS, Software Engineering Name: Venkateshwaran (2015A7PS0122P)	2018- 19- sem1
Dell R&D	Vulnerability testing iDrac to check for any security problems found in the web application part of the application Tool used (Development tools - H/w, S/w): Kali and inbuilt app, hyper-v, python and packages Objectives of the project: Automate vulnerability testing for iDRAC Major Learning Outcomes: Python, web applications, bashing, networks Academic courses relevant to the project: Networking Name: Amreen Shaikh	2018- 19- sem1
Dell R&D	My project is PLDM compliance test suite. There is a protocol named PLDM. My work involved developing command line interface tool. Tool used (Development tools - H/w, S/w): C language. Linux. Server.  Objectives of the project: Aim of the project is to check the compatibility of FPGA chip with PLDM protocol Major Learning Outcomes: I learnt about PLDM, CLI development. Brief Description of working environment, expectations from the company: Work environment is relaxed. Managers maintain a cordial environment. Mentors are helpful in technical assistance. Academic courses relevant to the project: C.	2018- 19- sem1
Dell R&D , Bangalore	Build a shared component Remote File Explorer which Popup the explorer window (Modal-2) on top of parent component (Modal-1) to browse server-side directory structure in path specified on the cluster. Onclick of a button in modal-1 popup the explorer window (modal-2) which contains fields viz search box, space to display the directories, back button, cancel and submit button and a text-box to display the path the selected. When a user specifies the path and click on submit button the component must return all the directories and files in that path, and this repeats even for if we click a child directory it will list all the sub directories and files in that path. Once we get the data from the cluster, we need to modify the data that is received. So that user can fetch any file stored in the cluster. And the implementation of functionalities specified above accordingly. Tool used (Development tools - H/w, S/w): Redux-React Java Script,VM ware. Objectives of the project: The Objective of this project is built (Remote File browse Explorer) on-click of the button a modal will popup which contain fields like search box, space to display the directories, back button, cancel and submit button and a text-box to display the path Major Learning Outcomes: Web UI technology React-Redux java script, GitHub. Details of Papers/patents: Brief Description of working environment, expectations from the company: I was assigned a mentor for my work .he was always there for doubts help me in review meetings. It is good working here. They expected to complete my work with in the specified time . Academic courses relevant to the project: None	2019- 20- sem1
Dell R&D , Bangalore	Developed an intranet web application that displays data taken from a remote server by establishing a ssh connection to the remote server. Consists of two web pages. One page is a kind of putty simulation where you can execute a single or list (file input) of commands. Second page displays a tree structure of objects taken from the server. Displaying the binary and readable format of the selected object's content. Tool used (Development tools - H/w, S/w): Django, putty Objectives of the project: They use command line interface like console or putty. The website (my project) replaces it and makes their work easier. Major Learning Outcomes: Full stack web development Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: None	2019- 20- sem1
Dell R&D , Bangalore	Translation of JSON data to Binray Encoded Json using dictionaries. Tool used (Development tools - H/w, S/w): Json, PLDM Objectives of the project: Understanding the schemas, finding the dictionaries for the given schema, encoding and decoding of Dictionaries Major Learning Outcomes: Pldm for redfish Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOP DSA DAA Student	2019- 20- sem1

Company	Experience	Year
Dell R&D , Bangalore	I am working on a data simulation project where we simulate the data generated by Dell's Isilon Large Scale Storage clusters. The deliverable was to find out Isilon cluster size feasibility. I have designed algorithms that create millions of database rows of data for several thousand nodes across 50+ clusters. I also worked on dashboards that could handle displaying data at this scale and engineered database solutions that could handle the dataset. Further on, I also worked with networking technology and cluster simulators to further verify if the proposal was achievable. I am currently working on virtual client servers and setting them up so that they will autonomously act like real clients and read/write data on the Isilon cluster, simulating an actual client load. I used Python, InfluxDB, and Grafana for this alongside several Dell in house technologies. Tool used (Development tools - H/w, S/w): Python, Grafana, influxDB, timescaleDB, Certain Dell Technologies, Docker Objectives of the project: Implement data generator, test influx vs timescale, simulate clusters Major Learning Outcomes: Learnt about Dell EMC Isilon product technologies, gained deep understanding of large scale database management Details of Papers/patents: Brief Description of working environment, expectations from the company: Very good working environment. all the colleagues and mangers are very nice, helpful people. They were always willing to help out and take the time to teach us what we needed to know. The company expected us to complete our deliverables on time, they understood our capabilities and expected us to learn what was needed to complete our task. Academic courses relevant to the project: Database Management, OOP, Data structures and algorithms Student	2019 20- sem1
Dell R&D , Bangalore	1) Modifying an existing full stack of a hardware specific web service to function without the device and using this simulation to test the front end. 2)Web security testing on a RESTful web service using an internal framework using Python. Tool used (Development tools - H/w, S/w): Python (requests, curl, http.server), HTML + CSS, Javascript, Angularjs, C++. Objectives of the project: Dell uses a RESTful web service to allow users to interact and control a particular product of theirs. The objective of the project was to take this existing service and modify it such that the backend draws data from test inputs. Major Learning Outcomes: Full stack web development and web security testing. Details of Papers/patents: Brief Description of working environment, expectations from the company: Office culture is welcoming and relaxed. Employees are communicative and willing to help. Goals and deadlines are kept relatively broad, allowing you to take your own approach as long as you're on time and keep updating your mentor. Academic courses relevant to the project: Computer Networks Student	2019 20- sem1
Deutsche Bank	Rating analysis of the counter parties on different templates- Sub sovereign, Corporate, Banks. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: Rating the counter parties on a 12 grade scale Major Learning Outcomes: Analysing the entities on a macro and micro level Brief Description of working environment, expectations from the company: Work culture is good. Academic courses relevant to the project: Fundamentals of Finance & Accounting, Derivatives & Risk Management, Financial Management PRIVATE LIMITED Student Name: SACHIN GADEKAR (2014B4A20758P)	2018 19- sem1
DEVELOPMENT CONSULTANTS	We tried to bridge the distance between traditional classroom learning and practical field application by presenting the nuances of the theory in conjunction with the technological aid employed in the industry. The assumptions and limitations of rational theoretical methods have been highlighted and their practical implications enumerated so as to present a more thorough picture of the designing process. A more dynamic role of the designer, applicable in the various phases of the construction activity, has been emphasized. For this purpose extensive references have been made to the various standard specifications and guidance has been sought from industry experts to work out the details of the design methodology. The report's field of inquiry is limited to the preliminary design work and its application in particular structural setup. Tool used (Development tools - H/w, S/w): STAAD PRO, SAP 2000, MS EXCEL, MS WORD Objectives of the project: To lay down the design and analysis of the building construction Major Learning Outcomes: Learned to use softwares such as STAAD PRO, SAP 2000, and writing reports, to use Excel. DELHI	2018 19- sem1

Company	Experience	Year
Divgi TorqTransfer Systems Pvt. Ltd Bhosari , Pune	1) Preparing Tooling Budget of LRP++ projectsUAZ 6 Speed MT, E Gear Drive & DCT: The project aimed to find out the total cost of tools required to prepare a budget for the LRP++ projects, especially E-Gear Drive & DCT. 2) Cycle Time Calculation of Gear Grinding: The project aimed to provide the formula for calculating the cycle time of the grinding process, using the provided real time data recordings and also improve the productivity of the process. 3) Capacity Planning of machines involved in different machining processes: The project aimed to determine the allotment of machines available in the production unit of the organization according to the part specific machining requirements and check whether there is a requirement of purchasing new machines. Machining processes are broaching, chamfering& roofing, hobbing, shaping& shaving. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: 1) To budget the total cost of tools required for the production of E Gear Drive & DCT for the year 2020-21 & 2021-22, 2) To derive the formula for the cycle time of gear grinding process being performed in the production unit, 3) Major Learning Outcomes: 1) Parameters on which the cycle time calculation of gear grinding depends- tooth depth, approach length, helix angle, wheel diameter, axial feed, no. of starts in wheel. 2) No. and types of machines available for production of parts. 3) Process of allotm Details of Papers/patents: Brief Description of working environment, expectations from the company: Opting for Divgi TorqTransfer Systems as my Practice School 2 station has been very beneficial for me. I was able to gain the knowledge and an industrial perspective similar to what I had expected. Other than the projects and technical work, I was able to gain personality development by inculcating the qualities such as discipline, punctuality & time management. I found the work culture of the organization very good and the coordination between the employees is very commendable. It has given me im	2019 20- sem <sup>2</sup>
Divgi TorqTransfer Systems Pvt. Ltd Bhosari , Pune	Prototype Development for 5 Speed and 6 Speed Manual Transmission Cases. I was also involved in the designing of packaging box layout for shipment of Outer Core Assembly to the Sonalika group and the design of the preliminary floor layout for the 5MT assembly Main Line. Tool used (Development tools - H/w, S/w): MS Excel, MS Powerpoint, UG NX 12.0, SMT Masta 10, SmartDraw Objectives of the project: The objective of the project is to assist in the manufacturing and design corrections that take place during development of a working prototype. Major Learning Outcomes: Learnings Related to project Learned about working of transmission, synchronizers, transfer cases and shift mechanisms Learned about various problems related to "Smooth Shifting" and how to identify and rectify them Technical Skills Learnt Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment of the company was quite friendly and helpful. I was guided by my mentors and helped by my fellow interns in any event when I was stuck or confused. The company employees are warm & understanding and enough time is given to complete the tasks and projects allotted to you. Academic courses relevant to the project: Manufacturing Management, Lean Manufacturing, Design of Machine Tools, Tool & Fixture Design, Machine Design & Drawing, Engineering Graphics Student	2019 20- sem1
DMI Finance Private Limited , New Delhi	An income prediction model for the customers who had taken a loan from the company was developed. Machine Learning Algorithms like XGBoost, Random Forest Regression etc. were used to predict the income. Before that the data to develop the model was accessed using the AWS Athena service. SQL was used for data analytics and relevant data was downloaded. Then the python IDE Spyder was used to develop the model. The basic workflow was as follows:- a)Visualization of the relevant data, b) Missing Value Imputation, c) Feature creation using the data, d)Finding the trends between independent and dependent variables e)Using various machine learning algorithms for prediction f)hyper parameter tuning. After model development the model was deployed on the Lambda service of AWS and an API was created for real time results. Tool used (Development tools - H/w, S/w): AWS Lambda, Athena, S3 Bucket, SQL, Python SciKit Learn, Pandas, SciPy, NumPy Objectives of the project: Develop an Income Prediction Model Major Learning Outcomes: Machine Learning Model Development, Data Visualization, Data Cleaning Details of Papers/patents: Final Report uploaded on PSMS Brief Description of working environment, expectations from the company: Great working environment and good learning opportunity. Small team of very helpful people. Working on live projects. Good Work-Life Balance. Academic courses relevant to the project: Machine Learning, DBMS, Python Student	2019 20- sem <sup>2</sup>

Company	Experience	Year
DMI FINANCE PVT. LIMITED, NEW	The work mainly I done here is regarding data analytics. This PS introduced me to the vast field on data analytics and the scope of growth in this sector. Most of the work I done was on Python, which is a great considering the use of python in many big companies. Tool used (Development tools - H/w, S/w): Software Tools: - Python, SQL Workbench, Amazon Athena, R Studio, MS Office Objectives of the project: To develop an income prediction model and deploying it on the cloud based server Major Learning Outcomes: I learnt various processes which are employed in model development process. I also learn how to deploy a developed model on a cloud based server with the use of an API. Brief Description of working environment, expectations from the company: The work environment is great. The colleagues and employees are very helpful and very friendly. In my experience the company is hugely employee oriented which is pretty good. Academic courses relevant to the project: Machine Learning, Data Mining, Data Structure and Algorithm Student Name: K Aravind	2018 19- sem1
Door Sabha Nigam Ltd. , Chennai	Reconciliation is process of analyzing and ensuring all sets of data are in agreement. This project ensures to validate and verify all sets of records at required checkpoints. This web framework also presents the report of errors and mismatches (if any) after validation of all sets of records. This detailed report of error analysis helps to avert any billing/revenue leakage. This project presents an easy solution to verify all the records for desired period. Error reports presented from this project would save a lot of time which otherwise would have been a tedious process for validation of records. Tool used (Development tools - H/w, S/w): Struts, Maria DB, HTML, CSS, JavaScript, jQuery, Shell script. Objectives of the project: Creation of web framework which ensures record reconciliation. • Automation of script for counts extraction and computations from log of different locations and modules. Major Learning Outcomes: web development, java Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOPS, DSA Student	2019 20- sem1
DreamWorks Animation India, Bangalore	I found DreamWorks Animation India internship as one of the most major turning points in terms of inspiration and knowledge. The first thing that strikes you when you enter such an office is the passion that you see in artists who work there. In an office where majority of the employees are artists, there are very few technical people who support the whole animation pipeline very efficiently. Even though it's a very niche industry the learning is pretty overall and complete. Right from the some applications that require deep knowledge in graphics, to web design, data modelling, neural networks, virtual reality, computer vision etc every kind of application is done here in the studio. The best part about the whole thing is that the system is extremely flexible to accommodate one's interests. I got the opportunity to develop and support the animation pipeline and since I was exposed to both the development and the pipeline side of it, it was a very good balance. This not only expanded the knowledge I had but also made me work more efficiently. Hence the quest for learning gradually develops to a very good level even without one realising it. The people at DreamWorks (mentors and colleagues) are a big motivation behind all this. They are there for clearing doubts and teaching whatever and whenever necessary, which helps a lot when you are a fresher in any industry. This PS experience will most certainly help in having a clearer picture of what to aim for in the future and the mentoring and contacts made through this program are more valuable than anything else. To sum it up, DreamWorks is the right place for someone who has that thirst for learning new things and having a passion for the VFx/Animation industry.	2015 16- sem1
DreamWorks Animation, Bangalore	I worked on the internal studio tools and Render Farm. We analyzed data generated from Render Farm and have successfully identified the straggler jobs on the farm using First Order Statistics. Built many other microservices to notify the stakeholders of the same in a visualized manner. Tools used (Development tools - H/w, S/w): Python, Scikit-Learn, Cytoscape, Flask, Gunicorn, Supervisord Objectives of the project: To streamline the workflow of Technical Resource Administers Outcomes of the project: Highly efficient scheduling and preemption of jobs on Render Farm Major Learning Outcomes: Analysis of Multi dimensional data Brief Description of working environment, expectations from the company: A brilliant working environment for an Intern as we were treated on par with full time employees. We were given various degrees of freedom to explore our ideas and implementations, were also part of the decision making and road map planning of our respective teams. This is an optimum environment to explore and grow not just in Computer Graphics or Data Science but almost in every aspect.	2016 17- sem1

Company	Experience	Year
DreamWorks Animation, Bangalore	I worked with the R&D team in DreamWorks Dedicated Unit, Bangalore to contribute to the development of DreamWorks' next generation animation and rigging software LUNA. I fixed a lot of bugs in the software and also added multiple features to the plugin. The work was majorly based on Qt (C++) with boost library. Some components of the software that I worked on also involved OpenGL. They used eclipse as editor, but used SCons to build and run the packages. Tools used (Development tools - H/w, S/w): Eclipse, SCons Objectives of the project: Development of LUNA Outcomes of the project:Multiple bug fixes and new feature addition to the software. Major Learning Outcomes: Gained experience in industry level software development. Learned about how animation works. Learned about SCons and learned organizing and building repositories through it. Worked in C++ and gained deep knowledge of Qt. Also worked with boost library. Brief Description of working environment, expectations from the company: The work environment was great. Culture was very flexible and everyone was friendly and supportive. The workflow is very well organised and helps in working with full efficiency. You also get exposure to outside teams in US. Also all the perks from the company gave a great experience in the 6 months internship duration. Student	2016- 17- sem1
DreamWorks Animation, Bangalore	I worked on the internal studio tools and Render Farm. We analyzed data generated from Render Farm and successfully identified the straggler jobs on the farm using First Order Statistics. Built many other micro services to notify the stakeholders of the same in a visualized manner. Tools used (Development tools - H/w, S/w): Python, Scikit-Learn, Cytoscape, Flask, Gunicorn, Supervisord Objectives of the project: To streamline the workflow of Technical Resource Administers Outcomes of the project: Highly efficient scheduling and preemption of jobs on Render Farm Major Learning Outcomes: Analysis of Multi-dimensional data Brief Description of working environment, expectations from the company: A brilliant working environment for an intern as we were treated on par with full time employees. We were given various degrees of freedom to explore our ideas and implementations and were also part of the decision making and road map planning of our respective teams. It was an optimum environment to explore and grow not just in Computer Graphics or Data Science but almost in every aspect.	2016- 17- sem1
DreamWorks Animation, Bangalore	I worked with the R&D team in DreamWorks Dedicated Unit, Bangalore to contribute to the development of DreamWorks' next generation animation and rigging software LUNA. I fixed a lot of bugs in the software and also added multiple features to the plugin. The work was majorly based on Qt (C++) with boost library. Some components of the software that I worked on also involved OpenGL. We used eclipse as editor, but used SCons to build and run the packages. Tools used (Development tools - H/w, S/w): Eclipse, SCons Objectives of the project: Development of LUNA Outcomes of the project: Multiple bug fixes and new feature addition to the software. Major Learning Outcomes: Gained experience in industry level software development. Learnt about how animation works. Learnt about SCons and organizing and building repositories through it. Worked in C++ and gained deep knowledge of Qt. Also worked with boost library. Brief Description of working environment, expectations from the company: The work environment was great. Culture was very flexible and everyone was friendly and supportive. The workflow is very well organized and helps in working with full efficiency. You also get exposure to outside teams in US. Also all the perks from the company gave a great experience in the 6 months duration of internship. Faculty Comments: Expectations from industry: Expectations from the industry - in terms of course requirements: Student	2016- 17- sem1
Ducere Technologies - Embedded Systems, Secunderabad	Pressure Sensors interfacing to determine fall risk in elderly people Tools used (Development tools - H/w, S/w): Matlab, Python, Arduino Objectives of the project: Fall Risk Parameter Calculation and Assessment Outcomes of the project: Parameters for comparing balance stability calculated Major Learning Outcomes: Team Work, communication skills Brief Description of working environment, expectations from the company: Company is a startup and the type of work done is different and innovative. Take this PS only if you are serious to complete the work given by company Academic courses relevant to the project: No pre-requisites Student	2017- 18- sem1
Ducere Technologies - Pattern Recognition, Secunderabad	Pattern Recognition for Gait analysis, Activity detection. Pattern recognition involves using K-means clustering, Dynamic time warping, Hidden Markov models. Tools used (Development tools - H/w, S/w): Python, Android studio, Xampp Objectives of the project: Pattern Recognition Outcomes of the project: Gait Segmentation, Exercise peak detection, Activity detection Major Learning Outcomes: Developing android application with server communication, learning python, and exposure to many machine learning algorithms and techniques. Brief Description of working environment, expectations from the company: This is a start-up company and so the work which we do directly goes into the mainstream. A lot of scope to explore a start-up company. A chance to interact with different teams. Academic courses relevant to the project: Machine Learning, Data mining. Mumbai Student	2017- 18- sem1

Company	Experience	Year
Ecom Express	The work is on Data Analytics and not Supply chain as mentioned in station description. A little knowledge of logistics and e-commerce industry is an added advantage. Key work is providing data driven solutions to business problems, Worked on productivity and planning. Long term project was on Network optimization and stabilization. Tool used (Development tools - H/w, S/w): R, Excel, SQL Objectives of the project: 1)Network Optimization: Developing the complete network model in R, for further use and minimizing the wait time of the network. 2)Planning: Improve current productivity and plan man power accordingly. Major Learning Outcomes: A thorough knowledge of ecommerce logistics. Understanding of analytical approach to business problems. Developing metrics to identify and solve problems Brief Description of working environment, expectations from the company: Working environment was good. All the employees in the team tried to help us. My manager Mr. Kruthika was really very helpful. He gave us ample time to learn the tools required for the project. He personally explained us every project and many times sat with us to help with the project. You will be handed work which will directly impact the work of others. So its a good learning opportunity, where you will learn how to handle responsibility. The company doesn't expect much, but knowledge of R will be useful. For people who will join next sem, I suggest you speak to Mr. Kruthika more often which will really help you( off course, possible only if he is still in the company) Academic courses relevant to the project: Operations Management, Operations Research, Supply Chain Management. Not necessarily relevant but will help. Name: Anmol Khandelwal (2014B4A40559G) Tool used (Development tools - H/w, S/w): R studio, excel Objectives of the project: 1) build a ranking model of delivery staff, 2) revenue model on R Major Learning Outcomes: 1) learned R studio and MS excel Academic courses relevant to the project: supply chain management Name: K Aravind (2014B5AB068	2018- 19- sem1
Ecom Express	Worked on multiple projects such as i)Mid-mile network optimization by implementing Dynamic routing and wait time optimization. ii)Man power planning based on volume predictions using regression models iii)Analytics driven Hub restructuring. Tool used (Development tools - H/w, S/w): Excel, R, SQL, PowerBI, Python Objectives of the project: Each project had direct impact on the working of the company. Mid-mile network optimization is a NP hard problem. I tried to provide a heuristic algorithm with the necessary constraints and also implement dynamic routing on a short scale to test its limitations. Hub restructuring was carried to improve the efficiency of network which had few bottlenecks and decrease the costs. Manpowr planning is a repetitive every month and we have given a semi-automated solution to the problem. Major Learning Outcomes: Complete understanding of logistics industry. Understanding of how analytics is used to solve business problems. Brief Description of working environment, expectations from the company: The work environment is very good. The manager Mr.Kruthika was very helpful and has guided us throughout the internship. The other team members were also very eager to help. The expections of the company are low, but having a basic knowledge of logistics and ecommerce industry and working experience on Excel and R for Data analysis will give you more time to work on projects. Academic courses relevant to the project: Probability & Statistics, Basic Programming, Supply Chain Management Name: Harsh Patel (2014B4A40643G)	2018- 19- sem1
Ecom Express	There were mainly 2 projects: mid mile and last mile analysis. The mid mile analysis involved working with distances and optimizing routes for better productivity. The last mile analysis involved working with Pincodes and maps. Tool used (Development tools - H/w, S/w): R, Excel Objectives of the project: The objective was to find the locality from a pincode and then use it for further analysis like Heat map, DC planning. Major Learning Outcomes: Got to know about the logistics industry and knowledge of pincodes, address and maps. Brief Description of working environment, expectations from the company: The working environment is really good and the people are really supportive there. Freedom of working on projects makes it really good for people expecting a productive PS. Academic courses relevant to the project: Optimization, Computer Programming	2018- 19- sem1
Ecom Express Pvt. Ltd Data Science , New Delhi	Developed a fuel prediction model for delivery agents using various data modelling and machine learning techniques. Remodeled the delivery center allocation by locality level mapping using various geocoding algorithms. Redesigned the delivery network of over 50 cities with a coverage of 75% and an accuracy of 85%. Worked extensively on optimizing on-ground logistics costs by mapping pin-code areas and distances. Tool used (Development tools - H/w, S/w): R, MySQL, Python Objectives of the project: Development of Fuel Prediction Model, Locality Mapping Major Learning Outcomes: R, MySQL, Python Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Suppy Chain Management Student	2019- 20- sem1

Company	Experience	Year
Ecozen Solutions Pvt.Ltd.	As a testing engineer, I had to perform a range of experiments to validate the theoretical capacity values of the Microchannel Heat Exchanger at various loads. Closely involved with the working of the refrigeration components, I played a crucial role in developing safe and efficient manufacturing processes. In the research field, I worked on Vacuum Insulation Panels and Exterior Coatings to improve insulation. Tool used (Development tools - H/w, S/w): Microsoft Excel, Fusion 360, Realterm, PyCharm Objectives of the project: Experimental validation and Future research Major Learning Outcomes: Working of Evaporators, Condensers, Thermal Storage. Application of Heat Transfer and Refrigeration Concepts in research of insulation material Brief Description of working environment, expectations from the company: Absolutely amazing work environment. The company being a start-up has a very carefree culture with no strict timings and dress code. Friendly employees always there for guidance. Since, its a very focused company, work can be very hectic at times. Academic courses relevant to the project: Heat Transfer, Thermodynamics, Refrigeration and Air-Conditioning Name: Nachiket Sant (2015A4PS0274P) Tool used (Development tools - H/w, S/w): Fusion 360, Ansys, Creo parametric Objectives of the project: Development and prototyping of new version of their product Ecofrost Major Learning Outcomes: Applications of concepts learnt in courses like Advanced mechanics of solids, Mechanical Vibrations, MDD etc. in design and analysis of product parts. Brief Description of working environment, expectations from the company: The working environment is very pleasant and my coworkers were helpful in clearing any doubts regarding the project. Academic courses relevant to the project: Advanced Mechanics of Solids, Machine design and drawing, Production Techniques, Heat Transfer, Mechanical Vibrations Student Name: Harshil Bhatt	2018- 19- sem1
Edelweiss financial services	Inflation Forecast for the Wpi, credit Scorecard formulation for loans against property and a project on statistical arbitrage Tool used (Development tools - H/w, S/w): Excel, R Major Learning Outcomes: Machine learning, basic finance, Mathematical modeling Brief Description of working environment, expectations from the company: Good working environment, helpful and cooperative staff, good learning experience, proper work timings and ample leaves Academic courses relevant to the project: Probability and statistics, statistical inference and applications Mentor Designation: Comments: Faculty Name: B.V Prasad Comments:	2018- 19- sem1
Edelweiss GI, Mumbai	Designed an algorithm based on Reinforcement learning technique, namely deep q-learning, which will automate portfolio management. This technique is used to train an agent in any stochastic environment to accomplish its target by maximising a self-defined reward function. In our project, portfolio re-balancing is the action and the state of capital market (based on various parameters) is the stochastic environment. Tool used (Development tools - H/w, S/w): Python, Jupyter notebook, tensorflow library, google finance APIs, matlab Objectives of the project: Using Deep Q-Learning to automate portfolio management Major Learning Outcomes: 1. Learned a futuristic technology namely deep qlearning. Google is ambitiously working on this algorithm for the last two years 2. Designing a customised environment in Python 3.  Mapping time-series financial data to understand correlation of specific factors with stock return Details of Papers/patents: 1. https://neuro.cs.ut.ee/demystifying-deepreinforcement-learning/2. http://cs229.stanford.edu/proj2016/report/JinElSaawyPortfolioManagementusingReinforcementLearning-report.pdf 3. https://github.com/llSourcell/deep_q_learning 4. https://medium.com/emergent-future/simple-reinforcement-learning-withtensorflow-part-0-q-learning-with-tables-and-neural-networks-d195264329d0 Brief Description of working environment, expectations from the company: Working environment was extremely uninspiring. No induction, initial 2 weeks were completely wasted, no clarity on the project or the team to work with, no technical mentorship. I had to myself approach top level executives to get introduced and ask for a project suitable to our credentials and company's needs. I would not recommend this division of Edelweiss at all. Academic courses relevant to the project: Machine Learning, SAPM Name: Aditya Joshi (2014B5A40825P)	2018- 19- sem1

Company	Experience	Year
Edelweiss GI, Mumbai	I was involved with two projects, which were alloted upon discussion with the company officials. The first project was in the domain of Social media analytics. We performed a PoC on using an individual health insurance policy holder's publicly available social media data to predict the propensity of suffering from a lifestyle disease in the near future. This information could then be used to mitigate risk and offer discount on premiums to policyholders. The second project falls under the domain of application of ML in Portfolio management. We performed a PoC on using the state of the art AlphaGo algorithm (which has been trained to play computer games) to dynamically rebalance assets under investment in a portfolio. Tool used (Development tools - H/w, S/w): Matlab, a list of Python libraries like numpy, scipy, pandas, tensorflow, and environments such as Keras, Jupyter. Objectives of the project: Social media analytics: Identifying risky policyholders which have high probability of making a claim in the near future. Identifying and dividing individual policyholders into different risk categories would then be used to enact differential pricing, leading to an increase in revenues as well as profits. ML in Portfolio management: Exploring the new tools of reinforcement learning to automate rebalancing of assets under investment in a portfolio. Major Learning Outcomes: Execution of a data science project, from the creation of a data pipeline to final tangible results of analysis. Learning to evaluate projects to be undertaken for exploration or implementation. Brief Description of working environment, expectations from the company: Edelweiss GI is a new company, so there is a lot of ambiguity in roles. The company is still designing it's products, and hence the roles are not set in concrete. Work environment is formal. Academic courses relevant to the project: Probability and Statistics, Mathematics 1, Mathematics 2, DRM, SAPM	2018- 19- sem1
EduPristine - Neev Knowledge Management Pvt. Ltd.,	I built a machine learning model which predicts the probability of conversion of an incoming lead. I also built a chat bot for our website. Tools used (Development tools - H/w, S/w): SKLearn library, Api.Ai Objectives of the project: The sales team should be able to choose the leads which have a better probability of being converted. Outcomes of the project: Successfully built the model, as well as the chat bot. Major Learning Outcomes: Got hands on experience in building complex projects while working in a team. Brief Description of working environment, expectations from the company: The management was very poor. They did not seem to be interested in our work. Our manager hardly communicated with us. It would literally be weeks without him enquiring about how our projects are going on. Academic courses relevant to the project: Computer Programming Faculty Comments: Expectations from industry: EduPristine was founded in 2008 became a Premier Finance Training Provider around the world in a short span of time. Over the years the company grew from one vertical to five verticals- Finance, Accounting, Analytics, Marketing, and Healthcare. EduPristine has built a strong online platform and network of classrooms across India and caters to self-paced learning, online learning and classroom mode of learning. Student has developed a web applications to improve Elearning marketing and managing other internal operations. Interns at Edupristine, Delhi are expected to work on Angular JS, Python, PHP, WordPress etc. Organization look forward to have interns with excellent programming skills. Student	2017- 18- sem1
Edupristine, Delhi	The project's official title is TETRIS, a fully functional web application for EduPristine's official website. The project comprises of both the front end and the back end including the payment gateways. The whole website is developed on Wordpress, which is on a local setup. Technologies used: HTML5, PHP, JavaScript, JQuery, CSS, WordPress. The title of the second project is NG-HARRY, a fully responsive web application developed on Angular 4. Angular 4 comprises of the typescript programming language. Tools used (Development tools - H/w, S/w): HTML5, PHP, JavaScript, JQuery, CSS, WordPress, Angular 4, VSCode. Objectives of the project: To develop an understanding about the web application development work. Outcomes of the project: Got a compete exposure about the software development environment and industry. Meanwhile learning different skill sets in CS field despite being a Civil Engineering student. Major Learning Outcomes: Angular 4, HTML5, PHP, JavaScript, JQuery, CSS, WordPress. Brief Description of working environment, expectations from the company: EduPristine is an online and classroom training provider for international certifications in Finance, (CFA, FRM, PRM) Accounting, (CPA and CMA [4]) Analytics (Business analytics and Big data Hadoop), Digital Marketing, Project Management and Six Sigma. EduPristine is headquartered in Piscataway, New Jersey, USA and has served professionals in more than 40+ countries[5] all around the world; mainly in Middle East, Africa, Asia and United States. They have conducted more than 1 million man hours of quality training. The work environment is pretty good with friendly co-workers and helpful manager to help out ease your work Academic courses relevant to the project: Programming in C Student	2017- 18- sem1

Company	Experience	Year
Egnify Technologies	Developing a feature or requirement in a web app using MERN stack development and deployment. Tool used (Development tools - H/w, S/w): React.js, MongoDB, Node.js, Express.js Objectives of the project: Developing a feature, making it pass all the testing(QA) quality assessment and deploying to production Major Learning Outcomes: Collaborative learning experience, larger scope of how a startup works both from technical and business point of view, learning MERN stack development., also working with version control system like git, load testing api's with locust. Academic courses relevant to the project: Data structures and Algorithms Database Management System Computer Networking	2018- 19- sem1
eGovernments Foundation , Bangalore	Developed a plan for an online training and onboarding program for technological partners. Tool used (Development tools - H/w, S/w): Overview of Learning Management Systems(LMS) Objectives of the project: To help understand the training need of technological partners and then to create a plan to enable them online. Major Learning Outcomes: Preparing and conducting a survey, managing partners, understanding the level of technological capabilities and preparing a plan for LMS. Details of Papers/patents: Brief Description of working environment, expectations from the company: The company has about a 100 employees who all work on the same floor. The environment is very relaxed. The company expects the interns to first learn about the company and the core technologies in the first month. Then clear projects are given for the rest of the 4 months. The interns are expected to work on their projects alongside any ad-hoc tasks that might come across. Academic courses relevant to the project: Principles of Management, Technical Report Writing Student	2019- 20- sem1
EMC, Bangalore	Integrating Custom Type Feature in DFS (Documentum Foundation Services) and CMIS. Tools used (Development tools - H/w, S/w): Java, Ant, Maven, DQL, Intellij, Tomcat Objectives of the project: Integrating Custom Type Feature in DFS (Documentum Foundation Services) and CMIS. Exposing their REST and SOAP Services. Outcomes of the project: These services can be used using REST and SOAP urls. Major Learning Outcomes: Learnt about Web Services. Brief Description of working environment, expectations from the company: Working environment is good and the culture is great. If you get under right team, then you get to learn a lot.	2016- 17- sem1
EMC, Bangalore	My projects at EMC involved experiments for proof of concepts. I worked with the embedded NAS team in the VMAX division. VMAX is the SAN solution. The eNAS team was focused on providing NAS capabilities by utilizing the hypervisor provided in the VMAX system to host Guest OS inside containers. The projects involved studying the current environment of the system and testing improvement in performance by making required changes. Tools used (Development tools - H/w, S/w): VI, Tmux, cscope, specSFS 2008, sysbench, SSH tools like Putty, scp etc. Objectives of the project: 1. Integrating remote virtual FA ports for Cut-Through-Driver for embedded NAS. 2. Explore the network configuration of VMAX and examine the IO performance. 3. Modify the kernel of the Control Station with custom configuration to evaluate the benefits of converting a uniprocessor Linux guest into a multi-processor capable one. Outcomes of the project: 1. Adding a remote virtual port increased the IOPS by almost 25%. More than one remote port on same FA emulation did not have substantial impact. 2. Time difference in using both subnets and only a single subnet is very small. 3. Custom kernel successfully built. Benchmarking remains to be done. Major Learning Outcomes: VMAX and eNAS ecosystem, benchmarking, performance analysis, SCSI, linux kernel, linux IO stack, PXE. Brief Description of working environment, expectations from the company: The people of the eNAS team with which I worked were very friendly. Mentors were very helpful. The team was very well knit and through the course of my PS program, I learned that the team organized many team-building activities to cultivate better relationships among peers and colleges within the team. This was not only refreshing to see but was a lot of fun to participate in as well. When it came to the technical work, the members had good knowledge and were very prompt in delivering solutions to the higher levels of management. The company expects the interns to be friendly and to be open to leaning.	2016- 17- sem1
EMC, Bangalore	Development of a new feature for one of EMC's products called AppSync, a software for copy data management. When an application database is added to AppSync for copy creation(data protection) on EMC storage, it's files are automatically discovered and mapped to the underlying storage when a service plan is run. The feature I worked on isolates these two processes from service plans and makes them available as on-demand operations for the user. Tools used (Development tools - H/w, S/w): Eclipse, JBoss Server, REST Client, VMWare vSphere Client, Putty, pgAdmin Objectives of the project: Feature development Outcomes of the project: Feature completion Major Learning Outcomes: Concepts related to storage, virtualization, RESTful web services, Java Brief Description of working environment, expectations from the company: Worked alone. Mentor helped in guiding me whenever I approached him. Otherwise, he was very busy. Other employees were helpful and friendly. Manager expects the work to be done before the deadline. No strict rules about punctuality as long as work is done.	2016- 17- sem1

Experience Year Company I worked on the testing automation of the Documentation (EMC's Enterpprise Content Management System). The work initially began with practicing Java and brushing up on Network Systems and creating Java sockets. Then the work became learning the Documentum product of the ECD Department to which I was assigned. I was then assigned a mentor who guided me and helped me understand automation and Apache Ant as a tool for doing so.I learned how windows event listeners are used to pick up occurrence of events and then run automated scripts (testing of new builds). I helped with the automatic mailer that reports the status of the automatic testing scripts. I also worked with the modularization and work flow control of the automation scripts. Then I was assigned the task of creating a web application to help make altercations to the properties files that configure the automated tests being run. The app also allows tests to be run from the app itself and the log files of the tests are displayed. The HTML Application forced me to acquire a better understanding of using the ActiveX Software framework which was required to run files from a browser without downloading it.It also pushed me to understand JavaScript and Document Object Model for HTML. Tools used (Development tools - H/w, S/w): Apache ANT, HTML Applications, JavaScript, Java. Objectives of the project: HTML Application to configure the testing process and ANT Scripts to run 2016-EMC, Bangalore the tests. Outcomes of the project: HTML Application was completed and so have ANT Scripts for the 17automated testing. Major Learning Outcomes: Scripting Languages (Javascript), HTML sem1 Applications, Document Object Model for HTML, Apache Ant (experience with automation tools), ActiveX software framework Brief Description of working environment, expectations from the company: The work environment was really friendly. All of the employees were really nice and the general atmosphere was happy. The work was in something I had never dealt with before so i found it rather hard but they were patient and encouraging, my mentor especially so. The company was always coming up with new products which we could see in our mail. There were always things happening (there was a team outing, some celebrations in the canteen, people dress up for festivities). The company was merged with DELL in the largest ever merger in the software industry. The department I was assigned to ECD, was sold to OpenText. The atmosphere remained positive and people were still working hard. The cafeteria and lodging amenities were very welcome. The company expected me to do my best and contribute by not just completing tasks assigned but also to explore and think about alternate ways of approaching the problem. They expected us to first get accustomed to the product we were working with and then figure out the tools we were going to use. Then they assigned smaller tasks that helped with the product. 1. The SCSI command monitor is responsible for intercepting SCSI commands being sent to a SCSI device 2. I/O request monitor is responsible for intercepting I/O requests intended for one SCSI device and redirecting it to another SCSI device 3. An approach for VPLEX insertion in an ESXi cluster environment. Tools used (Development tools - H/w, S/w): VIM, CScope, VMware vCenter, VCLI, ESXCLI Objectives of the 2016-EMC, Bangalore project: The Non-Disruptive insertion of VPLEX in a data center with zero downtime for the host(s) 17-Outcomes of the project: Featured in Milestone -1 for the concept car "Non-Disruptive insertion of VPLEX" sem1 Major Learning Outcomes: Linux kernel internals in terms of IO stack, ESX clusters, SCSI protocol Brief Description of working environment, expectations from the company: Good working environment, friendly, great team cohesion, Opportunity to learn. For my first project, I worked in the field of DevOps in creating a continuous integration solution for an EMC product. In the second project, I wrote the code for the assigned test cases for another EMC product called NetWorker. Tools used (Development tools - H/w, S/w): S/w tools: GoCD Objectives of the project: The objective for the continuous integration solution was to create a working prototype for a software, which can be easily extended for the required use of the company. Outcomes of the project: The prototype 2016was completed in a Continuous Integration framework called GoCD. Major Learning Outcomes: I learned EMC, Bangalore 17about DevOps, which is crucial software engineering practice. Learning about working in a huge sem1 corporation was also a big add-on. Brief Description of working environment, expectations from the company: The working environment was excellent. Most people enjoyed working in the office space. Also, there were many recreational avenues. The office timings weren't strict and so it was easy to adjust accordingly. The company expected work to be done, regular reports were to be submitted to the managers. The managers were pretty friendly and approachable too. VIPUL SINGH (2012B3A7511G)

Company	Experience	Year
EMC, Bangalore	I worked on Continuous Integration for Block Based Backup Module of NetWorker. The basic idea was to create a framework which would help in reduction of regressions. So, i used tools like reviewboard and jenkins and wrote a php script which would trigger the build remotely. I used webhooks extension of reviewboard for this purpose. For testing networker I used SAT framework. I also worked on end-to-end automation for NSM filesystems. The basic idea was to create a robust framework which would automate the whole testing process like:- creation of VMs, assigning IPs to VMs, adding LUNs to VMs, creating filesystem (.ext3), installing Networker on VMs and running TITAN which is a framework written in Python mainly for testing Networker Snapshot module. Tools used (Development tools - H/w, S/w): ReviewBoard, Jenkins, SAT, TITAN, Vcenter, STAF, VmWare toolkit Objectives of the project: To reduce the cases the regressions faced while combining all the source code. Outcomes of the project: Significant Reduction in the development cycle as well as regressions for any NetWorker build. Major Learning Outcomes: Understanding of the workflow of development cycle. Got basic idea about the functioning of NetWorker and protect point. Got to learn about various data storage and protection techniques like VMAX, VNX. Brief Description of working environment, expectations from the company: The working environment was really good and conductive. All my team members were really helpful and assisted me in the project. SNEHA KULKARNI (2012B4A7748G)	2016- 17- sem1
EMC, Bangalore	I was allotted the QE team for TaskSpace. My project involved automating the end to end testing for their products. Testing is an integral part of software development process. Automating test cases reduces the manual labour of testing and also reduces the chance of human error. I have used Selenium API with JBehave for automation. Test cases were written in form of scenarios which were then implemented using Selenium. Along with this, a GUI was also created to simplify the automation process. Tools used (Development tools - H/w, S/w): I have used Selenium API with Java for automating test cases. I have also used BDD with JBehave. Objectives of the project: The project aimed at development of automation framework using Selenium for end to end testing. A simple GUI was also created to simplify the automation process. Outcomes of the project: The automation framework was developed as a outcome of this project. The project resulted in a one click process to carry out the entire end to end testing. Major Learning Outcomes: Through this project I got to know how software development process is carried out. I learned about automation and scripting. Brief Description of working environment, expectations from the company: EMC is known to have a very friendly working environment. The team I was allotted to was very co-operative and helping. I get to know many new concepts through them. I have learned a lot from them. PARMOD KUMAR GARG (2013A7PS136H)	2016- 17- sem1
EMC, Bangalore	Worked on automating the test cases for emc networker. Tested different functionalities of EMC Networker like backup, clone, archive etc. SAT framework used. Scripts were written in TCL. Tools used (Development tools - H/w, S/w): SAT framework used. Objectives of the project: Automation of EMC Networker framework Outcomes of the project: EMC Networker was tested for different fucntionalities Major Learning Outcomes: Learnt TCL. Brief Description of working environment, expectations from the company: When we joined the EMC, it was in merger phase with dell. Working environment is very cool. Any time come or leave. It helped us to prepare for our personal goal. Student Gona Aravinda Rao (2013A8PS399P)	2016- 17- sem1
EMC, Bangalore	Integrated Custom Type Feature in DFS (Documentum Foundation Services) and CMIS. Tools used (Development tools - H/w, S/w): Java, Ant, Maven, DQL, Intellij, Tomcat Objectives of the project: To integrate Custom Type Feature in DFS (Documentum Foundation Services) and CMIS. To expose their REST and SOAP Services. Outcomes of the project: These services can be used using REST and SOAP urls. Major Learning Outcomes: Learnt about Web Services. Brief Description of working environment, expectations from the company: Working environment is good and the culture is great. If you get the right team, you get to learn a lot.	2016- 17- sem1

Experience Year Company My projects at EMC involved experiments for proof of concepts. I worked with the embedded NAS team in the VMAX division. VMAX is the SAN solution. The eNAS team was focused on providing NAS capabilities by utilizing the hypervisor provided in the VMAX system to host Guest OS inside containers. The projects involved studying the current environment of the system and testing improvement in performance by making required changes. Tools used (Development tools - H/w, S/w): VI, Tmux, cscope, specSFS 2008, sysbench, SSH tools like Putty, scp etc. Objectives of the project: 1. To integrate remote virtual FA ports for Cut-Through-Driver for embedded NAS. 2. To explore the network configuration of VMAX and examine the IO performance. 3. To modify the kernel of the Control Station with custom configuration to evaluate the benefits of converting a uniprocessor Linux guest into a multi-processor capable one. Outcomes of the 2016project: 1. 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When it came to the technical work, the members had good knowledge and were very prompt in delivering solutions to the higher levels of management. The company expects the interns to be friendly and open to learning. Development of a new feature for one of EMC's products called AppSync, a software for copy data management. When an application database is added to AppSync for copy creation (data protection) on EMC storage, its files are automatically discovered and mapped to the underlying storage when a service plan is run. The feature I worked on isolates these two processes from service plans and makes them available as on-demand operations for the user. Tools used (Development tools - H/w, S/w): Eclipse, JBoss 2016-Server, REST Client, VMWare vSphere Client, Putty, pqAdmin Objectives of the project: Feature 17-EMC, Bangalore development Outcomes of the project: Feature completion Major Learning Outcomes: Concepts related to sem1 storage, virtualization, RESTful web services, Java Brief Description of working environment, expectations from the company: Worked alone. Mentor helped in guiding me whenever I approached him. Otherwise, he was very busy. Other employees were helpful and friendly. Manager expects the work to be done before the deadline. No strict rules about punctuality as long as work is done. I worked on testing automation of the Documentum (EMC's Enterprise Content Management System). The work initially began with practicing Java and brushing up on Network Systems and creating Java sockets. Then the work became learning the Documentum product of the ECD Department to which I was assigned. I was then assigned a mentor who guided me and helped me understand automation and Apache Ant as a tool for doing so.I learnt how windows event listeners are used to pick up occurrence of events and then run automated scripts (testing of new builds). I helped with the automatic mailer that reports the status of the automatic testing scripts.I also worked with the modularization and work flow control of the automation scripts. Then I was assigned the task of creating a web application to help make alterations to the properties files that configure the automated tests being run. The app also allows tests to be run from the app itself and the log files of the tests are displayed. The HTML Application forced me to acquire a better understanding of using the ActiveX Software framework which was required to run files from a browser without downloading it.It also pushed me to understand JavaScript and Document Object Model for HTML. 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Company	Experience	Year
EMC, Bangalore	1. The SCSI command monitor is responsible for intercepting SCSI commands being sent to a SCSI device. 2. I/O request monitor is responsible for intercepting I/O requests intended for one SCSI device and redirecting it to another SCSI device. 3. An approach for VPLEX insertion in an ESXi cluster environment. Tools used (Development tools - H/w, S/w): VIM, CScope, VMware vCenter, VCLI, ESXCLI Objectives of the project: The Non-Disruptive insertion of VPLEX in a data center with zero downtime for the host(s). Outcomes of the project: Featured in Milestone -1 for the concept car "Non-Disruptive insertion of VPLEX". Major Learning Outcomes: Linux kernel internals in terms of IO stack, ESX clusters, SCSI protocol Brief Description of working environment, expectations from the company: Good working environment, friendly, great team cohesion, opportunity to learn.	2016- 17- sem1
EMC, Bangalore	For my first project, I worked in the field of DevOps in creating a continuous integration solution for an EMC product. In the second project, I wrote the code for the assigned test cases for another EMC product called NetWorker. Tools used (Development tools - H/w, S/w): S/w tools: GoCD Objectives of the project: The objective of the continuous integration solution was to create a working prototype for a software, which can be easily extended for the required use by the company. Outcomes of the project: The prototype was completed in a Continuous Integration framework called GoCD. Major Learning Outcomes: I learnt about DevOps, which is a crucial software engineering practice. Learning about working in a huge corporation was also a big add-on. Brief Description of working environment, expectations from the company: The working environment was excellent. Most people enjoyed working in the office space. Also, there were many recreational avenues. The office timings weren't strict and so it was easy to adjust accordingly. The company expected work to be done, regular reports were to be submitted to the managers. The managers were pretty friendly and approachable too.	2016- 17- sem1
EMC, Bangalore	I worked on Continuous Integration for Block Based Backup Module of NetWorker. The basic idea was to create a framework which would help in the reduction of regressions. So, I used tools like reviewboard and jenkins and wrote a php script that would trigger the build remotely. I used webhooks extension of reviewboard for this purpose. For testing networker, I used SAT framework. I also worked on end-to-end automation for NSM filesystems. The basic idea was to create a robust framework which would automate the whole testing process like:- creation of VMs, assigning IPs to VMs, adding LUNs to VMs, creating filesystem (.ext3), installing Networker on VMs and running TITAN, which is a framework written in Python mainly for testing Networker Snapshot module. Tools used (Development tools - H/w, S/w): ReviewBoard, Jenkins, SAT, TITAN, Vcenter, STAF, VmWare toolkit Objectives of the project: To reduce the cases that the regressions faced while combining all the source code. Outcomes of the project: Significant Reduction in the development cycle as well as regressions for any NetWorker build. Major Learning Outcomes: Understanding of the workflow of development cycle. Got basic idea about the functioning of NetWorker and protect point. Got to learn about various data storage and protection techniques like VMAX, VNX. Brief Description of working environment, expectations from the company: The working environment was really good and conductive. All my team members were really helpful and assisted me in the project.	2016- 17- sem1
EMC, Bangalore	I was allotted the QE team for TaskSpace. My project involved automating the end to end testing for their products. Testing is an integral part of software development process. Automating test cases reduces the manual labour of testing and also reduces the chance of human error. I have used Selenium API with JBehave for automation. Test cases were written in form of scenarios which were then implemented using Selenium. Along with this, a GUI was also created to simplify the automation process. Tools used (Development tools - H/w, S/w): I have used Selenium API with Java for automating test cases. I have also used BDD with JBehave. Objectives of the project: The project aimed at development of automation framework using Selenium for end to end testing. A simple GUI was also created to simplify the automation process. Outcomes of the project: The automation framework was developed as a outcome of this project. The project resulted in a one click process to carry out the entire end to end testing. Major Learning Outcomes: Through this project I got to know how software development process is carried out. I learnt about automation and scripting. Brief Description of working environment, expectations from the company: EMC is known to have a very friendly working environment. The team I was allotted to was very co-operative and helping. I get to know many new concepts through them. I have learned a lot from them.	2016- 17- sem1
EMC, Bangalore	Worked on automating the test cases for emc networker. Tested different functionalities of EMC Networker like backup, clone, archive etc. SAT framework used. Scripts were written in TCL. Tools used (Development tools - H/w, S/w): SAT framework used. Objectives of the project: Automation of EMC Networker framework Outcomes of the project: EMC Networker was tested for different functionalities Major Learning Outcomes: Learnt TCL. Brief Description of working environment, expectations from the company: When we joined the EMC, it was in merger phase with Dell. Working environment is very cool. Any time come or leave. It helped us to prepare for our personal goals. Student	2016- 17- sem1

Company	Experience	Year
EMC, Bangalore	Development of root cause analysis engine of the upcoming MARS product. Tools used (Development tools - H/w, S/w): Apache Spark, virtual machine, eclipse. Objectives of the project: Real time event correlation. Outcomes of the project: Distributed computation of root cause in RCA engine. Major Learning Outcomes: Distributed computation of root cause in RCA engine. Applied for a patent which provides method and apparatus for real time event correlation. Details of papers/patents: Method and apparatus for real time event correlation. Provided 3 methods which will make the existing product workable in real time. Brief Description of working environment, expectations from the company: Excellent work environment. My work was related to research and development but cannot say the same for all of my fellow EMC interns. Academic courses relevant to the project: Dsa, oop.	2017- 18- sem1
EMC, Bangalore	The present measures of automation and testing to test coverage and impact are not efficient. They are not good enough to detect various blind spots and to provide correct percentage of code coverage by execution of test suite execution. The automation developer is unable to develop required tests to cover these blind spots. As a result the impact factor is low. Moreover, there are no measure of pre-checking for developers. A developer is unable to be certain of the coverage and the impact of his code at lower level. If there is such measure it will omit various cycles between the automation and testing team and the development team. Thus, if a developer is able to pre-check his code, there will be sufficient increase in efficiency and productivity of the product team. Tools used (Development tools - H/w, S/w): python, mongodb, redis, gcov, lcov, makefile Objectives of the project: To maximize impact factor and make effective test suite Outcomes of the project: Developers will be able to know code paths that are not covered in automation, to do more testing, thereby reducing regressions. Test engineers will be able to write more effective tests and increase impact factor. Major Learning Outcomes: Writing python scripts, designing database systems, working on databases, working with makefiles, using coverage tools, working on linux. Details of papers/patents: Method and apparatus for real time event correlation. Provided 3 methods which will make the existing product workable in real time. Brief Description of working environment, expectations from the company: Working environment is very flexible, especially in terms of time. They focus more on how effectively and efficiently you work rather than when you arrive or leave. Learning opportunities are immense, it depends on your willingness and how much you push yourself. Academic courses relevant to the project: Database Systems, Operating System, Computer Programming, Data Structures and Algorithms.	2017- 18- sem1
EMC, Bangalore	The objective of the project is to automate the process of deploying an Avamar server. The current process requires a user to manually install the server and then configure all the network details by themselves, which not only takes a lot of time, but also is a very tedious task. The project aims at creating a User Interface for the concerned audience, consisting of a form to take all required inputs from user, and then trigger the deployment script using a python script. Tools used (Development tools - H/w, S/w): Jenkins, ATAP, Avamar, Django Objectives of the project: To automate the deployment of Avamar Virtual Edition. Outcomes of the project: Successfully created automated deployment procedure for AVE, which allows user to just submit one Django form and takes care of all the deployment process by itself. Major Learning Outcomes: I learned about various Automation tools like Jenkins, ATAP, etc. I also learned about Web Development using Python Django Framework. Brief Description of working environment, expectations from the company: The working environment of the company is really good. The colleagues are really helpful and patient. Academic courses relevant to the project: OOP.	2017- 18- sem1
EMC, Bangalore	I performed read and write performance tests of many graph databases & verified the features they provide. I also worked on Kubernetes and docker and learned how to make microservices. Tools used (Development tools - H/w, S/w): Cassandra, Spark, GraphX, DSE GraphFrames, Neo4J, Flink, OrientDB, ArangoDB, Kubernetes, Docker, Linux platform based Virtual Machines Objectives of the project: To find the best graph database that fulfill our product needs. Outcomes of the project: We found that the best graph database for our product is ArangoDB. Major Learning Outcomes: I learned all the software I mentioned above and many new concepts of Database Management. Brief Description of working environment, expectations from the company: The working environment is good. Colleagues are friendly. Facilities are also nice. Overall the company is nice. Academic courses relevant to the project: Database Systems, Computer Networks.	2017- 18- sem1
EMC, Bangalore	Worked in designing the next Generation SMARTS product a network monitoring and analysis tool. Mainly worked on the DevOps part of deployment of microservices using Kubernetes as container orchestration tool for docker containers. Tools used (Development tools - H/w, S/w): Docker, Linux Objectives of the project: Kubernetes Deployment of Microservices Outcomes of the project: Creating a Test and Dev environment for deployment of application Major Learning Outcomes: Apache Spark, Cloud Computing, Virtualization, CI/CD Brief Description of working environment, expectations from the company: Very friendly working environment lots of support from Alumni and Staff. Academic courses relevant to the project: Computer Networks, Cloud Computing, DSA, OOP, Database Systems.	2017- 18- sem1

Company	Experience	Year
EMC, Bangalore	My project was software development of VDI Plugin of Networker. I worked on feature development, bugs solving and escalations. Tools used (Development tools - H/w, S/w): C++, C# Objectives of the project: Feature development, bugs solving, escalations Outcomes of the project: Solved cases which were of P1 severity Major Learning Outcomes: learnt how things actually work at enterprise level Brief Description of working environment, expectations from the company: So luckily I got into a very good teams, which made my things easy. working environment was just amazing in my case Academic courses relevant to the project: DSA, OOP, DBMS	2017- 18- sem1
EMC, Bangalore	I was assigned to handle the expression engine module of the SMARTS - a root cause analysis engine for events occuring in networks. The existing code was in Java and Scala and scripting language used was Groovy. The project was purely on the development side. I, after thorough research on various cluster computing frameworks and databases, proposed suitable platforms for the expression engine. Also, I designed the architecture specifications including the expected code flow and functionalities supported. I restructured the previous sequential code to make it multithreaded and distributed environment compatible, thus reducing the time latency by a significant margin. Several other major algorithmic proposals were submitted by me which are still being incorporated in the product. Applied for a patent which is yet to be granted, as mentioned below. Tools used (Development tools - H/w, S/w): Apache Spark, Scala, Groovy, Java. Objectives of the project: To design and develop a real-time root cause analysis engine to be deployed over ditributed framework as microservices. Outcomes of the project: The latency in detection of root cause has been theoretically resolved to achieve near real-time analysis. Practically, The expression engine was scaled out partially to enhance calculations atleast X8 times faster than the existing product. Major Learning Outcomes: Got familar with scala and increased proficiency in Java. Cluster computing basics. Patent filing gave a lot of technical and higher level exposure. Details of papers/patents: Submitted a patent on 'Method and Apparatus for Real Time Event Correlation' (Status: Pending) along with Ashwin Daswani(2014A7PS119P). The patent suggests several major algorithmic changes in the approach of existing root cause analysis engines in networks such as to make the whole process real-time or near real-time and scaling it out over a distributed, cluster computing framework to reduce latency. Brief Description of working environment, expectations from the company: The company was	2017- 18- sem1

Company Experience Year

My work in the company focuses on developing Network Models using languages like Groovy, TOSCA, etc. for the Modelling Engine which is the micro serviceable component for the product called SMARTS++ which is an improvement over the currently existing Dell EMC product SMARTS to provide broader use of Auto-scaling Microservices, Database Persistence and Customization to the end-user and change the existing in-memory data storage to an actual graph database. We decided to go with Groovy further and then performed creation and testing of models/templates. Apart from this, I got the opportunity to build and execute the huge codebase through which I learnt the application and implementation of tools and frameworks like grade, Maven, TestNG, JUnit, Eclipse, etc. Objectives of the project: develop the architecture of network modelling engine for nextgen smarts. Outcomes of the project: The main objective is to develop the modelling engine (Model Manager) component for NextGen SMARTS product. Collected the requirements from clients and then come for the scope on which we worked. Below it contains the abstract of these requirement tags. Class Definitions:- The Model Manager will define class structures for each Entity. An entity can represent a component of a network/cloud/storage domain. The classes will be defined to support all object-oriented features and yet it should be independently defined so that it entity types can be arbitrarily combined to form topologies. Relationships and Reverse Relationships:- The Model Manager will define relationships that will bind entities to other entities. The relationship types will be defined in consultation with the modules that interface with the Model Manager such as Discovery Engine and Expression Engine. A class can define both Forward as well as Inverse releationship between entities to complete the relationship pair. Relationship Sets:- The Model Manager must have the capability to specify one is too many and many is too many relationships between two entities through the relationshipSet keyword Attributes:- The Model Manager will classify the attributes of the entities using the following keywords - stored attributes will represent all attributes that are persistent in the persistence layer - Constant attributes have values initialised during instance creation and cannot be changed - propagated attributes represent values that will change owing to a problem or symptom with respect to the entity via relationships or relationship sets. These values may be computed and propagated based on external events. Behavioural Model Attributes:- The Model Manager will store all propagated attributes of an entity as a separate data structure and will define methods to make it available to external interfaces Object Model Attributes:- The Model Manager will specify a data structure that would contain all the attributes and characteristics of the entity. The Model Manager must provide the necessary interfaces to return only the object model based on queries. The Model Manager will return the attributes of the object model as a name-value pair Building Entities and Relationships w.r.t Network Standards:- The Model Manager must provide frameworks to define Entities and relationships in accordance with the industry standards. For instance, a Cloud applications may choose to create the entities and relationships based on TOSCA standard and legacy switches/routers may define models based on YANG/NETCONF standard Provision For Dynamic Modelling:-The model manager must provide REST-based interfaces to support Dynamic Modelling wherein an External GUI interface can create topologies on the fly and the model manager must be able to construct the entities and their relationships and form the object model Web-Based Interface:- The model Manager must make available REST interfaces to query the Model Entities and relations for external web-based interfaces Dynamic Restart:-The model manager must be able to restart itself as a service when a model changes dynamically. Major Learning Outcomes: For me the learning outcomes are so many like some of them mentioned below:- - Learn Professionalism - improved communication skills - developed the skills of time management - learnt various new languages like :groovy, tosca, scala, perl - working experiences of various cutting edge tools. Brief Description of working environment, expectations from the company: This company dell emc provides ample amount of opportunities for new interns. they provide good projects for us and so much to learn from team and from

project as well. All the teammates are very helpful. Overall work culture is good but According to me this thing does not depends on the company rather I will say it will varies from manager to manager. They provide working flexibilities like work from home. To chill there are recreational places(24X7) where we can play indoor games like foosball, pool, billiards, carrom, chess, table tennis, etc. and also they provide facility to play outdoor games like cricket, basketball, etc. Work they gave me is as per my expectation. My project contribution towards the product which is an improvement over the currently existing Dell EMC Corporation product SMARTS to provide broader use of Auto-Scaling Microservices, Database Persistence and Customisation to the end-user is to develop the whole independent modelling engine component from scratch only using the glimpse of dependent model manager component from classic SMARTS. I learnt a lot from this practice school. Thank you PSD for providing us this opportunity Academic courses

EMC, Bangalore

2017-18sem1

relevant to the project: COMPUTER NETWORKS, OOP, DSA, COMPILER

Company	Experience	Year
EMC, Bangalore	My work was mainly in Automation testing. Used a framework called ATAP for HyperV automation. Tools used (Development tools - H/w, S/w): ATAP, a C# based framework for automation Objectives of the project: Complete HyperV Automation Outcomes of the project: Was able to successfully run the existing script, and added some new features to the existing framework. Major Learning Outcomes: Learnt C# and Automation Testing. Brief Description of working environment, expectations from the company: Working environment at Dell EMC was very conducive. I got to learn about their huge array of products, explored a lot of new technologies, that i was unaware of before. Got a hands on experience of automation testing in particular, and testing in general. Academic courses relevant to the project: None as of now.	2017- 18- sem1
EMC, Bangalore	Worked for the design and development of a Network Topology Discovery program for the purpose of a general Framework development. Assisted in the testing of the Topology code for effective development of the program. Performed a POC to determine the best way to use a Rule based framework for Anomaly detection. Developed the Database information loading module. Set up a deployment pipeline for real-time maintenance of program Tools used (Development tools - H/w, S/w): Apache Spark, Drools, Java, Python, Groovy, Scala, Apache Jmeter, Concourse CI, ASL scripts, Apache Kafka, Apache Flink, ArangoDB, mPutty, RHEL, centos Objectives of the project: Design and development of a Network Topology Discovery program for the purpose of a general Framework development Outcomes of the project: Designed and developed a Network Topology Discovery program for the purpose of a general Framework development along with other things to assist in the overall development of the Framework, both from a usage and a development perspective. Major Learning Outcomes: Current industry standards in using different software and how to use them Brief Description of working environment, expectations from the company: The people in the company are very friendly and the work environment is very good. Expectations from the company were pretty high and we constantly had sufficient work to keep us busy. It was also not overwhelming all the time but there were a few sprints where we did receive more work than usual (which is to be expected). There isn't too much scope for growth, especially after the Dell merger. Academic courses relevant to the project: Computer Networks, Big Data Analytics, Object oriented programming, Database Systems. Student	2017- 18- sem1
Ericson Global India Services, Bangalore	Logging is an essential part of any service provided. Having an efficient log yet not missing out on a lot of information that makes debugging difficult, is essential. This project aims at developing a tool that provides a more coherent way of debugging issues through efficient logging. This is done by a two step process – creating a unique key for each debug statement and recording only essential parameters, which is stored in a buffer and flushed out whenever a capsule occurs and decoding debug statements from the key. Tool used (Development tools - H/w, S/w): TiGER, Eclipse Objectives of the project: To make logging and debugging more efficient Major Learning Outcomes: Advanced C++, Application services of MTAS, IMS architecture Academic courses relevant to the project: Mobile Telecommunication Networks, Communication systems Name: Chinmay Agarwal (2015A3PS0271G)	2018- 19- sem1
Ericson Global India Services, Bangalore	Spreadsheet Analytics Java Program Rest API created for calculating the efficient workdays of the employees at Ericsson. Debugging of an internal JavaFX Program. Tool used (Development tools - H/w, S/w): Java, JavaFX. Objectives of the project: Improve internal efficiency Major Learning Outcomes: Software Development Academic courses relevant to the project: Object Oriented Programming Student Name: Durjai Sethi	2018- 19- sem1
Ericsson Chennai	1. Worked on fixing internal and external Trouble Reports, testing the verification core loops and automating the test cases on Robot Framework platform. 2. Worked on analysis of BSCS of R3 branch, and to implement the licensing structure for both clients and developers into R4 branch of BSCS. Tool used (Development tools - H/w, S/w): Eclipse, Robot Frameworks Objectives of the project: Automation of test cases, fixing of Trouble Reports and porting BSCS versions Major Learning Outcomes: Automation, testing, development Name: Dhanush K (2015A8PS0374P)	2018- 19- sem1
Ericsson Chennai	Robot Framework Automation and Licensing of BSCS Tool used (Development tools - H/w, S/w): Robot Framework Objectives of the project: To automate tests using Robot Framework. Also to implement a licensing provision for BSCS R3 Major Learning Outcomes: Robot Framework Automation Brief Description of working environment, expectations from the company: The work environment is friendly and flexible. The employees are kind and supportive. There is no excessive work load and the work is easy to pick up. Name: Mohit Chugh (2015A3PS0189P)	2018- 19- sem1

Company	Experience	Year
Ericsson Chennai	1.Unit testing and automation for the backend files of the charging system of the organization. 2.Analysed the time to generate the heap dump when a certain amount of traffic is pumped onto the server.  3.Replacing the currently used messaging queuing system (Apache ActiveMQ) with a new one (Apache Artemis). Tool used (Development tools - H/w, S/w): Eclipse, JUnit, CodePro Analytix, Putty, HP Gen8 Virtual Machines Objectives of the project: 1.To automate unit testing for the charging system. 2. Generate dummy traffic on the server and analyse the time to dump the logs on the heap when different amount of heaps are filled. 3. Replace the message queuing system to avoid crashes for large message queues. Major Learning Outcomes: 1.Learned Unit Testing and Automation. 2.Message queuing systems and their implementation. Academic courses relevant to the project: CS F213 - Object Oriented Programming Name: Pratyush Priyank (2015A3PS0188P) Tool used (Development tools - H/w, S/w): DES Algorithm, Shutdown Hook, Beautiful Soup Objectives of the project: Developing a Search Utility for search Product Customization key IDs Major Learning Outcomes: Learnt about ShutDown Hook, Beautiful Soup, which is a very efficient tool for web scraping, and DES algorithm. Brief Description of working environment, expectations from the company: Nothing was planned for us. They are used to accommodating VIT interns, who intern there for 10 months, so it was presumed that nothing very significant could be done in just 5.5 months and hence, we were mostly neglected. The only intermittent tasks that were assigned, were mostly related to testing the codes already written by someone. DO NOT EXPECT ANY DEVELOPMENT PROJECT. Academic courses relevant to the project: Object Oriented Programming	2018- 19- sem1
Ericsson Global India Pvt. Ltd., Bangalore	Project around Asp.NET Web Api, coding in C# Tools used (Development tools - H/w, S/w): Visual Studio, a lot of git Objectives of the project: Backend development for Ericsson's MediaFirst IPTV platform. Outcomes of the project: Backend development for Ericsson's MediaFirst IPTV platform. Brief Description of working environment, expectations from the company: Working environment quite flexible. Timings not rigidly imposed. Amount of work you have ultimately depends on your team, project and the nature of your mentor. Most projects may involve lot of coding, and they do tend to give time to catch up on required skills. Academic courses relevant to the project: C Programming.	2017- 18- sem1
Ericsson Global India Pvt. Ltd., Bangalore	worked on a project in SDN department. it was troubleshooter interface which works in the control section of then SDN architecture. Tools used (Development tools - H/w, S/w): python, BOOTSTRAP, graphviz Objectives of the project: troubleshooting interface. Outcomes of the project: product developed to be released for testing Major Learning Outcomes: computer languages, SDN Brief Description of working environment, expectations from the company: they should specify and take students with regard to their need in departments. mentor allotment should be better.	2017- 18- sem1
Ericsson Global India Pvt. Ltd., Bangalore	Developers require a new Image(base code) every time they start to work on a new TR. Building this image would take around 3 hours leading to inefficiency. We designed a server where the image was already built. Through socket programming any client could send the changes made to this server, where they were patched and the image would be built in 10 minutes. With the help of multi-threading we were able to connect multiple clients in parallel. Tools used (Development tools - H/w, S/w): Python Objectives of the project: To minimize the time taken to build a base code Outcomes of the project: The image was built in around 10 minutes which would otherwise take 2-3 hours Major Learning Outcomes: Socket Programming, Multi-threading Brief Description of working environment, expectations from the company: No particular office timings. Academic courses relevant to the project: Any programming language Student	2017- 18- sem1

Experience Year Company My main project involved the extraction of the dependencies of the company on the tools of other companies from the code that Ericsson is developing. The aim was to automate this lengthy process of finding the dependencies and initiating negotiations and reduce human effort in every possible scenario. The process involved making a Maven plugin for this process and directly uploading the results to the company's website to begin the negotiations for the api that have been used by the code of Ericsson and have been developed by other companies. Also, for a competition in the company known as the Hackathon, we developed a recommender system to break the query entered by the user and suggest the best possible person in the company who can answer this query depending on the data present in the database of the tool which is entered during the time of registration, This code was also developed in Java. I was also involved in the core team of back-end development in Ericsson which got me into back-end code testing using Junit framework. The process of this involved learning how to work with mockito and using mock objects to test the main framework of the code without disturbing the contents of the code. The main aim of the project was to crate test scenarios and check if the existing code can pass all the test scenarios before being deployed and aggregated to the available code of the company. The code was 2018-**ERICSSON GLOBAL PVT LTD** developed using Java. Tool used (Development tools - H/w, S/w): Java, Maven, Junits, Lucene, Mockito 19-**GURGAON** Objectives of the project: Code Dependency Extraction and Code Testing Major Learning Outcomes: Huge sem1 Improvement in coding skills, Understanding Junits and BlackBox testing and Architectural Development of a web tool recommender system Brief Description of working environment, expectations from the company: The working environment of Ericsson Gurugram is extremely pleasant and the interns and employee interaction is really good. The employees respect and help the interns whenever we required help and the managers are also extremely polite and work oriented. The project allotment is done on the basis of the intern's capability and area of expertise which I think is really good as the interns are given their project depending on factors such as which language they code in , the previous projects that they have done and their interests. Also, even the senior executives of the company are extremely helpful. The organisation of competitions such as the Hackathon encourages innovation and hard work in the company. Also events such as success outings of projects and team outings really help in interaction. The company provides and environment which encourages interns to learn and create tools for the company which can help the employees in the future worldwide. Academic courses relevant to the project: Object Oriented Programming, Data Structures, Database Management Systems Name: Udyan Mahajan (2014B5A80876P) Ericsson is currently working on a real-time biller called the Revenue Manager. The RM project comprises of multiple modules which work together to complete the query. The testing and automation team is responsible for testing the functioning of all the specific modules, as well as the working together of multiple modules in cohesion. My project, which is a sub project of the Automation team, is to automate the testing environment so as to install all the modules without requiring input from the user. This is done using Shell Scripting. The input is given in the form of a CSV file, which contains all the details required by 2018-FRICSSON GLOBAL PVT LTD the system to install the modules. The program goes through the file one by one, installing the modules in 19-**GURGAON** the order specified. Tool used (Development tools - H/w, S/w): Bash, Python Objectives of the project: sem1 THE AUTOMATION OF SETUP FOR THE TESTING ENVIRONMENT Major Learning Outcomes: Experience in Coding, Multi-script projects Brief Description of working environment, expectations from the company: Working Environment is pretty intern-friendly. As long as the work is done and deadlines are met, there is not much stress. The timings are very flexible and the company employees are very helpful when it comes to your queries and problems. Name: Shreyas R (2015A3PS0162G) Ericsson employs an automation server which is used to automate part of the software development process and a code review server based on Git. Every night, test cases are run on the code that was committed during the day and the failures are reported the following day. The process of matching each test case failure with a specific commit that has caused it becomes tedious if there are many failures for a day. The project was to automate the downloading of each test case, and analyse the output log file comprehensively to determine which error has caused the test case failure. After completing the primary analysis, analysis jobs were triggered and analysed after they have finished. Tool used (Development tools 2018-**ERICSSON GLOBAL PVT LTD** - H/w, S/w): Python and corresponding libraries Objectives of the project: To run the entire process of 19-**GURGAON** mapping commits to test case failures on the machine and time and effort taken to download and analyse sem1 is greatly reduced from doing it manually Major Learning Outcomes: Usage of web scraping libraries Better knowledge of Python Communication technology development in a R&D company Brief Description of working environment, expectations from the company: Working environment was very friendly. Team members were always ready to help and assist in any way possible. There were no strict timings to follow.

courses relevant to the project: CS F111 Student Name: Jairaj Paruthy (2015A4PS0307P)

The projects seem more CS oriented rather than Electronics based and are based on the team. Academic

Experience Year Company Quantitative Financial Modelling. My Project was to develop and automate the pricing of Asian Basket Options using various models and then compare the simulation based results and benchmark them with the market price. I developed several models like Implied Volatility model, Local Volatility model using Dupire's algorithm and the most important Local Correlation Model. This model can now be used to price the Asian Options of given any maturity tenure. Tool used (Development tools - H/w, S/w): Python, Excel, 2019-Frnst & Young Global Powerpoint Objectives of the project: To Price Asian Options using Various models Major Learning 20-Delivery Services, Bangalore Outcomes: Time Management General Management Networking skills Communication skills Improved sem1 Coding skills Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment at EY is something to definitely talk about. I must thank and appreciate to all the people who've helped me throughout to learn. People are very collaborative and helpful. Organization not only expects us to be technologically advanced but also have an overall good and confident personality. Academic courses relevant to the project: Differential Equations Student I got an opportunity to work with Ernst & Young LLP as a trainee in the Advisory sector under the PS-2 programme. I worked in Government Advisory service line under the Power and Utilities domain. The team I worked with actively engaged with both the government and private clients in the renewable energy sector. I got to work upon projects broadly pertaining to Solar rooftop and Electric mobility space. The projects comprised of tasks ranging from market assessment by means of primary and secondary searches to development of credentials and CVs for proposals. I was also involved in conducting a stakeholder discussion workshop for large scale adoption of Grid connected Rooftop Solar by SMEs. The work at E&Y gave me an exposure to the depth and the intricacies involved in consulting space starting from pitching for a proposal/tender to delivering the final report. The work though tedious at times is essential and elementary in the consulting domain and made me aware about the prerequisites of being a consultant. I would like to extend my thanks to the team for their constant support and help throughout the tenure. It was a wonderful experience working with the EY. Tool used (Development tools - H/w, S/w): MS Office, exclusively MS Excel and MS PowerPoint Objectives of the project: Undertook several projects in Electric mobility and rooftop solar space which included development of knowledge database of current rooftop 2018solar as well as Electric Mobility Scenario in India Major Learning Outcomes: The projects gave me an Ernst & Young Gurgaon LLP 19opportunity to gain insights into the current energy scenario in the county as well as the growth potential sem1 in power and utilities division, primarily in renewable space. The work experience also helped to groom business writing and soft skills Brief Description of working environment, expectations from the company: My PS-2 at Ernst and Young Gurgaon LLP, was my first stint in the consulting space and it really gave me something to look forward upon. It was a major transition from theoretical based knowledge to a real world scenario and helped me to get a different perspective overall. The work which began with a relatively dull phase of studying eventually turned into rigorous clientele work ranging from preparing credentials, formatting CVs, preparing invoices and culminating to the satisfactory delivery of reports, all the while maintaining a professional demeanor and adhering to the stringent guidelines. I expected the organisation to provide me with a platform to engage in difficult business problems and to understand first-hand how such problems are solved. This was an experience which was granted to during my tenure in the organisation. EY is a great place to gain corporate exposure and my time spent at the organisation has helped me gain a lot in terms of my overall development and I thank the PS Division and EY India for this opportunity. Academic courses relevant to the project: Solar thermal process engineering, Principles of Management

Year

Experience

Company

Having worked as an intern at Exotel Techcom Pvt. Ltd. for the past 4 months i have been exposed to various popular frameworks and platforms in the software industry. The ones among them that i find the most important are using an open source operating system like ubuntu which gives you the root access and allows you to pretty much to do anything on the OS. The other one being SSH, which is used to access the remote web servers (often called as cloud) to manage the code base and run instances of the software. With the whole industry moving towards a cloud based infrastructure this happens to be one of the technology that cannot be missed out. These past months have went really well with the company's work culture being very easy to adapt and this helped a lot in easing up with the new work environment. The best thing I have experienced is, there's no micro management at the workplace. We were given work, but we were never told to finish it in only a certain way. We were let to think of solutions that can solve the problem on our own and experiment with it till we got comfortable. This internship has also helped us to closely see how code is written at the production level as we only experienced it at a developer level. It was amazing to see how the very basic concepts learnt since the beginning have a role at one or the other stage in the development process. Never have i thought they are so closely applicable in real life. Building a web application from the scratch for development has also made us prioritize the documentation process. We got accustomed to proper code documentation and a few standards that need to be followed to effectively maintain the code in repositories. I also got acquainted with SQL more now and got to work 2015-Exotel Techcom Pvt. Ltd.. with a few CRMs like Pipe drive and Intercom. This internship experience certainly adds weight to my 16-Bangalore experience and resume as well and prepared me to avoid the mistakes that can possibly happen while sem1 designing an application's architecture. Shivangi Singh (2011B1A8783P) Discipline: E&I I have been working on a web application at Exotel for the past 4 months. Having worked here as an intern has given me a huge exposure to IT industry. I came across various popular frameworks currently being used by web developers like Ruby on Rails and Larvae. We worked on Amazon web servers, familiarized ourselves with SSH, which issued to access the remote web servers. We also used different types of APIs to access data from different CRMs like Intercom and pipe drive. Exotel, being a start up and growing at an exponential rate taught me how to handle different situations. The work environment here is very friendly and flexible. Most importantly, everyone's view is taken seriously and thought upon. We are encouraged to find the solutions in our own way. Building a web application from the scratch, prepared me to avoid the mistakes that can possibly happen while designing an application's architecture. Object Oriented Programming (OOP) concepts helped me to develop architecture efficiently. I also understood the importance of documentation and standards to be followed to maintain the code repositories. This internship has also helped us to closely see how code is written at the production level as we only experienced it at a developer level. This experience has enormously helped me with my practical knowledge and towards the implementation of different concepts that I learnt. It will play an important role in making my essional life more productive in future. As a fresher to finance, I started with studying about Derivatives and how they are valued in excel, I studied Black Scholes formula and its applications. I wrote python library for valuation of Swaptions and Caps&Floors. Later I studied on Interest rate models. Applications of stochastic volatility interest rate models, I built a library for SABR model, which is used in valuation of derivatives Tool used (Development tools - H/w, S/w): MATLAB, Python, VBA Objectives of the project: The objective was to build a library for a stochastic volatility model to value derivatives. Major Learning Outcomes: Finance knowledge, Stochastic 2018-Calculus, Programming, Application of pure maths. Brief Description of working environment, expectations EY GDS, Banglore 19from the company: The colleagues here are very welcoming, being one of Big 4 companies, the working sem1 atmosphere is very professional. The learning opportunities are vast. EY is a very good place for a fresher to grow professionally. My mentors were very supportive and have given me quality projects. They expect interns to deliver for the company, what ever interns do here it should be a value addition for he company Academic courses relevant to the project: All Maths courses and especially knowledge in Calculus and Statistics is important, C, Data Structures and Algorithms, Finance courses are very helpful. The work here is a combination of Maths, finance, Computing Name: Shivam Anand (2014B4A1804P) Risk Management. Quant Consultant. Financial Modelling. Feel free to ask for specifics! Tool used (Development tools - H/w, S/w): Python, Excel Objectives of the project: Interest Rate Modelling 2018-EY GDS, Banglore (Stochastic Calculus) Major Learning Outcomes: Interest Rate Modelling, Stochastic Calculus, Market Risk, 19-Risk Management Academic courses relevant to the project: Derivatives & Risk Management + sem1 Mathematics CDC's (NumPDE, Measure & Integration) Name: Rishabh Saxena (2014B3A80721P)

Company	Experience	Year
EY GDS, Banglore	Worked on various cutting edge financial regulation techniques such as CECL and CCAR. Assigned a lot of training projects and training sessions by company. Worked on real life regulatory projects in first half of PS. In second half, worked extensively on financial models and vetting customers based on financial scores, etc. Also contributed to the firm with internal training modules designed by me. Tool used (Development tools - H/w, S/w): Excel, Word, PowerPoint, SAS, R Objectives of the project: Client work for financial modeling Major Learning Outcomes: Financial model techniques and regulatory standards for banking Academic courses relevant to the project: Econometrics, Derivatives and Risk Management, Applied Econometrics, Object Oriented Programming, C Programming.	2018- 19- sem1
EY Gurgaon (Advisory Services)	I worked on Multiple Consulting projects falling within the categories of Solar rooftop and Electric Vehicles in India. The Project involved conducting market research to understand the current situation and the scope these 2 sectors in India. I studied past trends seen in both the sectors and the policies which the government plans to introduce to tackle challenges in adopting EVs and solar rooftop. Policies of other prominent countries in these sectors was also analysed properly to understand the kind of market conditions and financial incentives which may be needed in India to promote these newly upcoming opportunities. Tool used (Development tools - H/w, S/w): MS Office Objectives of the project: I mainly worked with the company in already ongoing projects and help them in it while learning from them side by side. Major Learning Outcomes: a.) I got a good idea of Electric Vehicles and Solar Rooftop Conditions in India. b.) I learnt what all government takes into consideration before framing the Policies. c.) Understood the skill of CV building and Presentation. Brief Description of working environment, expectations from the company: The Office environment is really friendly and almost everyone in the EY team is always ready to help or clear doubts. The team usually follows office timings and doesn't force you to stay late unless the work to be done is very urgent. You can choose to ask for work which you would like to do in addition to what you are already working on. Academic courses relevant to the project: Principles Of Management, Production Planning and Control Student Name: Sargun Nagpal	2018- 19- sem1
Fidelity Investments , Bangalore	Designed optimum stock trading indicators combining technical analysis tools with topic modelling on news articles and SEC fillings to get additional fundamental analysis indicators. This helps to correlate the returns of a stock with the returns of stocks in a similar industry and the occurrence of news articles on the web. This project was performed by combining a number of machine learning models with natural language processing functions. Tool used (Development tools - H/w, S/w): Working in python, the following libraries were used: 1. pandas 2. sklearn 3. matplotlib 4. tf-idf vectorizer Objectives of the project: To integrate topic modelling of news articles on tech companies with their stock market returns to create an indicator of stock price movement Major Learning Outcomes: 1.Machine Learning models such as linear regression, logarithmic regression and random forest regression 2. Vectorizers such as tf-idf vectorizer 3. Natural language processing Details of Papers/patents: Brief Description of working environment, expectations from the company: The company employee experience is extremely friendly where all team members are willing to help out most of the time. Team outings are regular and company sponsored which helps to increase employee bonding and a sense of trust. Academic courses relevant to the project: None	2019- 20- sem1
Fidelity Investments , Bangalore	Worked here to build a pipeline for creating word embedding from live chat data generated from customers, extracting key features by dimensionality reduction and fitting it into an ML model for accuracy evaluation. Tool used (Development tools - H/w, S/w): Hive, NLP models from gensim, xgboost, Python3 and various python3 libraries Objectives of the project: Automation of chat featurization and dimensionality reduction Major Learning Outcomes: NLP, AI Details of Papers/patents: Brief Description of working environment, expectations from the company: Flexible working hours, Manager and mentors were very supportive. No heavy workload and they only expected us to finish the work before deadline. Academic courses relevant to the project: NNFL, Machine Learning Student	2019- 20- sem1
Fidelity Investments , Chennai	Our problem statement was to process raw log files and predict the health of the server at any given future instant of time. We used MLP classifier model for the prediction. Tool used (Development tools - H/w, S/w): Python, Anaconda Spyder IDE Objectives of the project: Oracle Business Intelligence Server Log Analyzer and Health Predictor Major Learning Outcomes: Learnt how to implement few Machine learning Models. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work life balance is great. Ample time given to learn. Company provides accommodation for the first two weeks. We were given transport facility too through out the internship. Academic courses relevant to the project: Information retrieval, Data Mining, Neural Networks and Fuzzy Logic, Machine learning Student	2019- 20- sem1

Company	Experience	Year
Fidelity Investments, Bangalore	My work was based on prediction of the prices of top 100 cryptocurrencies by market capitalization and was divided into 4 parts: 1. First was collecting data, extracting features out of it, developing a recurrent neural network architecture for prediction and then prediction of next hour price. 2. Second was connecting and dumping the results to a MySQL database. 3. Next was running a batch job to automate the above tasks. 4. Last was to design a web application for users to view the predicted prices, accuracy as well as some graphs for analysis. Tool used (Development tools - H/w, S/w): Python (Numpy, Pandas, Keras, TensorFlow, SQLAlchemy, Django), Angular, MySQL Workbench. Objectives of the project: Prediction of Cryptocurrency prices Major Learning Outcomes: Strong coding ability in Python, Deep learning, Machine Learning, Cryptocurrencies specific domain knowledge, Blockchain Brief Description of working environment, expectations from the company: The company is so decent as to give you first week accommodation and flight travel reimbursement as part of the first month stipend. Work timings were not strict. More stress was given on timely completion of work, rather than how much time was spent in office. The best part was the company provided transport both for login and logout and a very systematic system and safety for the same. Academic courses relevant to the project: Machine Learning, Neural Networks and Fuzzy Logic, Data Mining Name: Vaishnavi Bhusari (2015A3PA0361H)	2018- 19- sem1
Fidelity Investments, Bangalore	My project was based on Data Science and Machine Learning. It was Cyber Security Threat Hunting. The main aim of this project was predictive analysis and global threat hunting in order to identify the possible potential threats to the organization's network. It involves gathering of information from various sources present within the Fidelity network, threats from outside world, threats to individual users, and the subsequent prescriptive measures in order to protect the organization. Tool used (Development tools - H/w, S/w): Software: R programming, MYSQL Objectives of the project: The major objective of this project is to device a platform which would consists of information from all the sources mentioned and predict the intensity parameters of the future possible threats. Major Learning Outcomes: Machine Learning, Data Science Techniques. Brief Description of working environment, expectations from the company: The working environment of the company is extremely favorable. They give sufficient amount of time to learn new programming languages and techniques, and also to understand the essence of project. One of the major goals of the company is to drive their project using Artificial Intelligence and Machine Learning, in order to achieve efficiency and optimization. The organization expects the students to understand the depth of the project and be punctual in completing the work assigned to them. Academic courses relevant to the project: Machine Learning (BITS F464), Foundations of Data Science (CS F320), Data Mining (CS F415)	2018- 19- sem1
Fiorano Software Technologies Pvt. Ltd., Bangalore	I learnt a lot during my PS at Fiorano Software Technologies Ltd. Some of the technologies used by the company were JMS (Java Message Service), J2EE, and other Java server technologies. Apart from these areas, my manager also encouraged me to learn about various advanced web development technologies (both front-end and back-end) such as, JavaScript, jQuery, AJAX, AngularJS basics and Node.js. Learning these various technologies is going to be significant since startups nowadays work on the latest technologies such as Node.js and AngularJS. The last 5.5 months in the industry have helped me transition from academic and theoretical learning to the practical implementation of various concepts learnt in BITS. Often the concept may be simple but the practical implementation may give rise to many unforeseen problems and issues, which must be quickly addressed. Before PS, I only knew C++ and Java, whereas the PS experience helped me gain knowledge about a wide variety of web-based technologies and how to use them in order to create a scalable web application. I also learnt how to write and deploy a stand-alone web server (written using Node.js) in Heroku and Open shift, since traditional web hosting sites do not generally support Node.js. I believe learning new technologies is beneficial for a person's career, since he can then keep track of the various developments in the field of computers to build better applications. In fact, even some of my seniors working in the company pointed out that web development is a useful skill to add to one's skill set since there's a lot of demand in that area. Following this advice, I created 2 webbased apps, apart from the company-related software automation project. The first app acts as a foreign country moving helper app, made to help people moving to foreign countries to better understand their environment. It was created using AJAX, equerry along with 5 external APIs (hosted at http://livenomad.in). The second one is a web chat app using Node.js and Socket.io with public and pr	2015- 16- sem1

Company	Experience	Year
Flipkart , Bangalore	Worked on sales forecasting problem with the data science team at Flipkart. Surveyed and researched multiple econometrics and deep learning models for high-dimension product-wise sales forecasting with different static and timedependent inputs such as offers and events. Tool used (Development tools - H/w, S/w): Python, R, Tensorflow, Shiny, Shell, SQL, Hive Objectives of the project: National Day-level Sales Forecasting Major Learning Outcomes: Learned to analyze and understand high-dimension data, gained insights of current research in time-series forecasting, and tuning deep learning architectures to practical use cases Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Excellent working environment and culture, good guidance from mentors. Regular sync-ups to keep track of progress and complete ownership of the project Academic courses relevant to the project: Neural Networks and Fuzzy Logic Student	2019- 20- sem1

Company Experience Year

My name is Tripathi Kartik Sanjay, ID No. 2012A3PS164P and I did my PS II from Flipkart Internet Pvt. Ltd.

Bangalore. I come from a non-CS background and I opted this PS Station Purely from my interest in competitive coding I did in college. I was assigned to a team that mostly had work in android programming. I had basic knowledge of OOP and DSA but the work here required more advanced knowledge in the field so I had to work hard towards studying the Android basics which also covered the OOP basics for me. Apart from our major project which was on Flipkart's delivery app's front end, we worked on multiple small projects and each one of them was a new challenge and required us to learn completely new things. Our work also involved us making multiple scripts for which we had to learn Python as well. Although Flipkart has grown so much as an e-commerce company but the startup culture still prevails here. You can have flexible working hours but the most important thing here is that you complete your work under the stated deadlines. So I learnt to complete my work assigned to me under strict deadlines. I also learnt how to work with a huge team because while you are working towards a feature in the app, someone else is also working towards something else in the same app so we had to coordinate with a lot of people so that multiple people don't affect each other's changes. Here I got to meet a lot of smart people and they helped me learn more about this industry as well as help me with my projects. Overall this PS was a great learning opportunity for me where I learnt the industry standards for working and otherwise. Trishu Dey (2011B1A7689G) Discipline: Computer Science PS-II provided me an opportunity to put my theoretical knowledge into practice. It gave an industrial exposure and an experience of the real world scenario suitable for my technical background. After having spent a duration of five and a half months at my PS - II station, Flipkart Internet Pvt. Ltd., an positively say that I have gained a lot of confidence and expertise to face the challenges in the industrial world. At Flipkart, my project was based on Android App Development and implementing some UI components from time to time. As UI/Android developments are not a part of any course structure, getting a project in this domain gave me a good opportunity to expand my knowledge base. Technologies like angular.js, d3.js, android etc. are rapid growing technologies and are in much demand in the IT market. Having gained a firsthand experience in these has increased my working domain. In the current times, where Smartphone's have become an essential part of everyday routine, learning to build android apps shall be very useful in future . These technologies learnt as a part of this project will definitely help me in my future prospects. Apart from the project PS-II also gives us industrial exposure. I learnt how coding standards are in an industrial environment. Modulation of the code is of utmost importance. This is because a major concern of the institutions is scalability of the code. The code should remain usable even after a particular person is off the project. It should be understandable to everyone. Thus, variable names, packages, documentation etc. need to follow certain rules as specified by the company. In an industrial environment, essional conduct is also of a lot of importance. PS-II gave me an exposure to this area as well. Addressing your colleagues and documenting all conversations via emails is very important in a work environment. It is my first experience in a industrial environment and this programme has helped me to smoothly build my way from an all academic environment to an industrial environment. Five and a half months is ample time for this transition. PS - II expanded my knowledge domain and built up my confidence to lead myself in this competitive industry. Tushar Poonia (2012B4PS981P) Discipline: Mathematics It was really an amazing opportunity to get internship at the ecommerce giant of India. I belong to Mathematical background with a keen interest in programming. Not being a pure Computer Science student never came in my way to perform tasks and learn new things here. I was assigned to a team which has most of it's work done in Android. Since I pursued Object Oriented Programming at campus, learning Android became easy because of it. Besides android, I was also required to write some scripts to fetch different data. For this purpose, I learnt Python and was able to get the desired output. It was great to implement academic knowledge to fulfil the objectives I was supposed to do. Flipkart is a well established company now but the startup culture still prevails here. The working hours are very flexible. The most important thing here is that you complete your work under the stated deadlines which made me learn to complete tasks assigned to me under strict deadlines. I also learned how to work with a huge team because while you are working towards a feature in the app, someone else is also working towards something else in the same app so we had to co-ordinate with a lot of people so that multiple people don't affect each other's changes. Here I got to meet a lot of smart people and they helped me learn more about this industry as well as help me with my projects.It was my first exposure to IT

Flipkart Internet Services Pvt. Ltd, Bangalore 2015-16sem1

these changes. PS - 2 broadened my knowledge and boosted a lot of confidence in me.

culture and this programme helped me in every possible way to make transition from an all-academic environment to an industrial environment. Five and a half months is optimum time to get acquainted with

Company	Experience	Year
Freshworks Inc., Chennai	Helping the Marketplace of freshworks grow in app numbers and creating a proper structure to keep track of partners and apps submitted by the partners and doing various campaigns to reachout to partners through market research and bring in more new partners. Tool used (Development tools - H/w, S/w): Freshsales, Excel, beautifulSoup(python) Objectives of the project: Help in growth of marketplace Major Learning Outcomes: Organisational skills, deep insight of SaaS industry, Data mining, GTM / Partnerships Brief Description of working environment, expectations from the company: Flat hierarchy, Flexible timings, No dress code, hard working and optimistic colleagues Academic courses relevant to the project: Data mining Name: Amulya Choudhary (2015A2PS0850P)	2018- 19- sem1
Freshworks Inc., Chennai	I worked as a Business Development intern at Freshworks Markteplace. My work included strategising, estimating and analyzing the different aspects of partner on boarding as a part of GTM(Go-to-market) strategy. Tool used (Development tools - H/w, S/w): Python, Web Scraper, ParseHub, Freshdesk, Freshsales. Objectives of the project: To reach 550 apps through ISV and SI partners in Freshworks Marketplace Major Learning Outcomes: Professional Work Ethic, Time Management, Task Prioritizing, Data Mining, Strong Estimation and analytical reporting skills. Brief Description of working environment, expectations from the company: Great work culture similar to that of startups in Silicon Valley. One can expect a PPO from this company. Flexible timings, Casual dress code, Free food throughout the day, Young energetic colleagues who make it easier for you to quickly learn and stay motivated.	2018- 19- sem1
FTD India Pvt Ltd	Built a virtual workflow builder and visualiser as part of FTD's Order Management System. The application is based on ReactJS and uses GoJS and other libraries to create a JSON format workflow from a visual flowchart or vice versa. This application was then integrated with a Conductor server API to store and retrieve the created workflows. Tool used (Development tools - H/w, S/w): ReactJS, GoJS, Redux, Netflix Conductor, NodeJS Objectives of the project: To build a virtual workflow builder Major Learning Outcomes: Front end web development Brief Description of working environment, expectations from the company: Very good working environment. Everyone is very supportive and always guided me whenever required. The company has a very nice work-life balance and the work never got too hectic. Academic courses relevant to the project: Computer Programming (CS F111)	2018- 19- sem1
Futures First Info Services Pvt Ltd , Hyderabad	I worked as a Research Analyst intern in the Capital Markets division. I was involved in the designing of tools that traders can use for better execution of their trades. I had access to a Reuters Market Terminal from which I would extract live or historical market data and work with traders to generate certain specific functionalities which would be presented in the form of an Excel sheet. Tool used (Development tools - H/w, S/w): Reuters Market Terminal, Trading Technologies, Microsoft Excel Objectives of the project: To provide traders with instruments and tools with functionalities that assist them in the implementation of their trades. Major Learning Outcomes: Analysis of market data Details of Papers/patents: Brief Description of working environment, expectations from the company: Friendly and helpful work environment. Academic courses relevant to the project: DRM, FRAM Student	2019- 20- sem1
Futures First Info Services Pvt. Ltd., , Jaipur	Made web application for analysing historical data in form of charts and tables and for identifying working technical indicators, if any for various derivative products being traded in the company. Applications were made using R studio and R shiny majorly. Data was extracted from Bloomberg terminal and cleansed before using further. We were also given TT simulator for week to trade in Euro Bunds and Gilts to get an idea about the trading experience. Tool used (Development tools - H/w, S/w): R Studio R Shiny Trading Technologies Excel Bloomberg Reuters Objectives of the project: To substitute use of costly softwares such as Rueters for analysing charts and patterns for live data using R. Major Learning Outcomes: 1) Trading Experience 2) App development 3)Technical Analysis Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DRM SAPM FINANCIAL ENGINEERING BAV	2019- 20- sem1
Futures First Info Services Pvt. Ltd., , Jaipur	Worked in R to develop analytical tools for quantitative analysis of different derivatives. The work included understanding the problems faced by traders during market research and product analysis, providing them with proper solution in the form of an app. The main motive of the project was to develop customised analytical tools to minimise the dependence of company on commercial apps and websites. Tool used (Development tools - H/w, S/w): R, Excel VBA and TT Platform Objectives of the project: To develop quantitative analysis tools using R. Major Learning Outcomes: Data Analytics, App Development in R, User Interface development in R Shiny Details of Papers/patents: Brief Description of working environment, expectations from the company: Futures first is one of the most result driven Proprietary Trading firms in India. The working environment is open, demanding, disciplined and focused work is expected. The management is very approachable and other employees are friendly. Academic courses relevant to the project: Probability & Statistics and Derivatives & Risk Management Student	2019- 20- sem1

Experience Year Company Gabriel India Ltd. a leading shock absorber manufacturing company. They design and develop new shocks depending upon the customer (most of the OEMs). In development process, prorotypes were built and tested to make sure all the customer requirements are statisfied. These prototypes were built in a way such that subassemblies can be varied for producing desirable Damping force in the damper (Shock absorber). Piston sub-assembly is one of such sub-assemblies. In Piston sub-assembly, valve stacks will be located on both sides. These are made up of shim discs, orifice discs. In development process, during testing phase, Damping force is generated by varying valve stacks, etc... that too in trail and error fashion. Because of this time taken to fine tune damper will be long. To reduce this time taking process, they initiated an application such that damping force can be generated for a given set of valve stack properties with a fixed shock absorber outline. In this application, Stage-I: Indentification deflection of valve stack with respective to velocity of piston rod in damper. Stage-II: Keeping deflection of stack as input, Stiffness 2019of the stack can be calculated Stage-III: Note: Damping force is nothing but resisting force offered by shim Gabriel India Ltd, Pune 20stack to oil flowing from one chamber to another chamber. Keeping stiffness as input, Damping force is sem1 calculated. A trend is generated for Damping force vs Velocity of piston rod. This prediction of Damping force w.r.t. velocity of piston will make the NPD (new Product Development) team take less time for appropriate valve stack. We developed a MATLAB GUI with references from Ansys fluent work, which will predict the deflection of the stack. Tool used (Development tools - H/w, S/w): MATLAB, Ansys (Structural & Fluent), Excel sheets, CATIA V5 Objectives of the project: Prediction of deflection of pyramid shim stack Major Learning Outcomes: 1. Non-linear deflection of Annular plates. 2. In-depth MATLAB experience. 3. Hands on experience in Ansys structural as well as Ansys flent. 4. Full scale development of GUI from scratch. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: 1. Mechanics of Solids 2. Advanced Mechanics of solids 3. Kinematics and Dynamics of Machines 4. Mechanical Vibrations 5. Production Techniques I & II 6. Machine Design and Drawing 7. Fluid Mechanics 8. Non-linear Vibrations 9. Numerical Fluid Flow and Completely core mechanical research work. Had to formulate a numerical method for prediction of damping offered by a specific arrangement of valves inside a twin tube hydraulic shock absorber which used various types of physics mainly CFD, FEM and Solid Mechanics. Also given some suggestions for Energy Harvesting regenerative feedback system to retain some energy lost by hysteretic losses. Tool used (Development tools - H/w, S/w): ANSYS, MATLAB, CREO, HYPERMESH, EXCEL Objectives of the project: 2019-Prediction of a Mathematical model to reduce the time taken in Product Development. Major Learning Gabriel India Ltd, Pune 20-Outcomes: Learnt Fluid-Structure Interactions, Machine Learning and various Softwares like CATIA, sem1 MATLAB, HYPERMESH. Also learnt the skills required in Project Management. Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment in my department (R&D) was pretty good. People were cheerful and the work culture was motivating. Academic courses relevant to the project: Advance Mechsol, FEM, NumTech, CFD, Fluid Mechanics, Applied Thermo, MDD Student

Experience Year Company Embedded systems were the major field in which I did my project. In my first project I worked on designing FOTA update for MSP430BT5190 a micro-controller which comes in the category of medium level embedded systems. It is very advanced technology considering the storage space of this microcontroller and due to limited RAM space many cautions were taken in developing FOTA. Coming to the experience which I got through is PS program is huge. It is a startup company so all the staff used to work for long hours. I got to learn working in teams. Support from mentor helped me a lot in implementing the design. It's completely different from what we learn in academics and what we implement. Practical problems are more than what are generally expected theory wise. I have learnt managing my life in various circumstances in outside world. Language problems, money management etc. For the first time when I came here I had no knowledge about embedded systems, the logics used and few other concepts regarding interrupts, but I was able to learn the required theories fast and implement them. My last project about app development using Cordova helped me learn about html and CSS. I got a clarity about what is my field of interest and which areas I am good or bad. I can focus more on my career now which I 2015-Garg Webtech Pvt.Ltd, wish to pursue in the field of embedded systems. Implementation of FOTA for the micro-controller seemed 16-Bangalore like a major achievement for me. I sincerely thank my mentor for his support which helped me a lot. Y S P sem1 Anirudh (2012A8PS414H) Discipline: E&I I learned about embedded systems and how to communicate with different IC's and about different software's. My first project is related to c language and interacting with a microcontroller, we need to update the code inside the firmware via Bluetooth and this is very interesting and easy as it doesn't require any wires. My second project is about the Schematics of IC. My projects helped me to understand the subjects in a different perspective. The subjects we studied in the class are a bit boring and I learned here are interesting, they are same but with more depth and more subjects combined and made the work here interesting. Without the academic subjects I wouldn't have done the work with ease, It just that they can introduce new courses about these topic for the interested students as Discipline electives or Open elective. I studied about the things that I didn't understand and with the help of my mentor I have broaden my knowledge. It helped me understand the core subjects and look at them in a new way. It also helped on understanding the work we need to do in a company. The first project about updating the Firmware, it worked and I was a part of this project with little contribution from my My main project involved understanding and modelling combined cycles (gas and steam turbines) in an inhouse software at General Electric. I also worked on two mini-projects involving Python and Java programming. The python based project involved understanding of concepts of machine learning which was a new skill I had to learn during the course of PS apart from the usual mechanical stuff. Also, the Java project was related to design automation and introduced me to a totally different domain. Tool used (Development tools - H/w, S/w): In-house simulation software, Java, Python Objectives of the project: Combined Cycle Modelling (Simulations) Major Learning Outcomes: In depth knowledge of combined 2018-General Electric, Bangalore cycles (gas turbines, heat recovery steam generators and steam turbines) through simulation assignments, 19-(JFWTC) introduction to concepts of machine learning and basics of Java programming Brief Description of working sem1 environment, expectations from the company: The working environment is the BEST you can find in any of the core mechanical industries. The people are super helpful and will make sure that you learn things the right way by the end of your internship. Especially the manager Dr. Muralikrishna is very considerate and will make sure that you get projects in your desired domain and make the most out of this internship. Academic courses relevant to the project: Applied Thermodynamics, Heat Transfer, CAD (basics of simulation software), Programming Basics Created a Ticket Management systems to manage all tickets of a client company. Tool used (Development tools - H/w, S/w): Django, python, html, css, bootstrap Objectives of the project: to make a fully functioning django app for to manage all tickets(complaints) Major Learning Outcomes: quite a good 2019learning experience. I learned python, Django. beside I also learnt to utilise html to full extent. Details of Genpact, Bangalore 20-Papers/patents: Brief Description of working environment, expectations from the company: Working sem1 environment is quite good. There is a good chance that you will land some good project in R or python or some data science(machine learning) project. Academic courses relevant to the project: Data structures and algorithm, Machine Learning.

Company	Experience	Year
Genpact , Bangalore	There are deployed machine learning pipelines in a dashboard meant for pharmaceutical companies. In addition to those services we need the entity extractors which will extract labeled words from the customer data to supply useful information to the clients. Research had been conducted for optimal entity extraction pipeline to be integrated with the dashboard but to make the clients understand the importance and reason behind the machine learning models' predictions, we need to develop a pipeline which accepts the models' predictions on data and provides a simplified visual explanation of the factors or indicators behind those explanations. Tool used (Development tools - H/w, S/w): Python, LIME, SHAP, Keras, Doccano, Spacy Objectives of the project: Implementing Named Entity Recognition and Model Interpretation on Medical Data Major Learning Outcomes: Learned - Preparing training data, data preprocessing, implementing entity extraction pipelines and interpreting their results. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Great working environment, supporting mentors and no deadline pressure. Academic courses relevant to the project: BITS F464 Machine Learning, CS F320 Foundations of Data Science, CS F407 Artificial Intelligence	2019- 20- sem1
Genpact , Bangalore	Learnt ML, Deep Learning and Reinforcement Learning from different online resources in the first 2 months. For the given combination of problem and dataset, I developed an RL algorithm that increased efficiency by more than 750% from the deterministic Dynamic Programming solution. I was also given the opportunity to deliver 2+ hours of RL Lectures every week to a distinguished team of employees including the AVP (Data Science head). Tool used (Development tools - H/w, S/w): OpenAI (made custom environment), explored DRL algos from Google DeepMind/Dopamine. Objectives of the project: Develop an efficient, customizable and generalized solution for space utilization using an optimal selection of products to maximize revenue. Major Learning Outcomes: Went through a lot of self-learning of most nascent and exciting field of Reinforcement Learning, read many cutting-edge research papers. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Environment is just great, no hierarchical opacity, direct and daily involvement with multiple AVPs in my case. Lots of space and time to learn things on your own. Its a good, workplace with minimal toxicity and pressure. Lots of cutting-edge AI projects (mostly in CV and NLP). Academic courses relevant to the project: ML, AI, DSA (I did mostly Dynamic Programming to compare and benchmark).	2019- 20- sem1
Genpact , Bangalore	It was a Machine Learning Project which involved object recognition followed by sentiment analysis. It was implemented on poster and video ads so that to analyse the impact the words and other attributes creates. Tool used (Development tools - H/w, S/w): Since its a ML based project, Python was majorly used. Keras, Tensorflow, Pytesseract were the libraries used. Objectives of the project: To design effective ad campaigns for the companies Major Learning Outcomes: The learning outcomes includes: 1. Machine Learning and deep learning basic knowledge 2. Computer Vision 3. Image Recognition. 4. Sentiment Analysis Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Machine Learning, Digital Image Processing	2019- 20- sem1
Genpact , Bangalore	Good exposure in supply chain management, also being a service based company we could foresee the whole supply chain of Kraft Heinz from industrial point of view. Projects were good and it helped a lot in the long run. Tool used (Development tools - H/w, S/w): Excel, Excel VBA, Python, JDA Objectives of the project: Optimisation of truck loads, Improvement in direct shipment Major Learning Outcomes: Applying optimisation techniques in real life and analysing data Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment was very good. People around us were friendly and easily approachable. The learning that we get from the experienced people around was quite good Academic courses relevant to the project: Optimisation Techniques, Fundamentals of fin & accounting, Supply Chain Management, Sustainable Manufacturing, Lean Manufacturing, Math 1,2,3 and Probability and Statistics, Computer Programming	2019- 20- sem1
Genpact , Bangalore	E Detailing/Digital Detailing is defined as the use of electronic and interactive media that facilitates sales representatives on sales calls with Health Care Professionals(HCPs). This is now a well established method of increasing pharmaceutical company efficiency in customer engagement, hence helping to better analyse business performance. Through data management and data analytics, a Digital Detailing tool has been developed in R Shiny. From the given database, which includes data about the eSales calls made by sales reps to HCPs, this tool analyses all the Key Performance Indicators(KPIs). The tool then helps to understand the significance of the KPIs by placing them in a visual context i.e., in the form of various charts and graphs. Tool used (Development tools - H/w, S/w): Rstudio, MsExcel, MySQL Objectives of the project: Develop a digital detailing tool for a global pharmaceutical company for the analysis of reachof eSales activity Major Learning Outcomes: Healthcare Domain, Data Analytics Languages (R, SQL) Details of Papers/patents: Brief Description of working environment, expectations from the company: Approachable teammates Academic courses relevant to the project: Pharmacoeconomics, Pharmaceutical Management and Quality Control, C Programming	2019- 20- sem1

Experience Year Company The complexity of managing projects has been increasing day by day. Quick browsing through the changes over past one decade tells us how fast the "Complexity" of managing projects has been changing. Various factors contributing and will continue for next one decade to name few, as, shortening product development cycles, changing customer expectations, exponentially increasing usage of internet as well as a greater number of millennial in the project teams. We believe, one of the ways to manage this complexity and the need of changing world, is using digitization. The digitization of Project Development phases will provide all synchronized database available to each member appropriately and same can be used for Managerial decision making. Building Analytics on this database, Risks affecting Project Performance Parameters – Time, Cost, and Quality can be effectively predicted and controlled. In addition, status will be 2019available for each project to individual project teams whereas Project Dashboard will provide bigger Genpact, Bangalore 20picture for managerial decisions on Strategies & Organizational Priorities. Because of its real-time nature, sem1 it can be available across the world at the same time providing a common platform to network and common language to interact. Tool used (Development tools - H/w, S/w): R, SHINY, SQL Objectives of the project: Create a platform for 1)Keeping track of projects distributed 2)Workload management and distribution 3)Tracking status and time for different projects 4)Visualizing the data entered Storing the project histories Major Learning Outcomes: R, SHINY, SQL Details of Papers/patents: Brief Description of working environment, expectations from the company: Good mentor, good project, good working environment with flexible timings. They just expect you to be sincere and finish the work before the deadline. They'll train you if you are not familiar with the working tools. Academic courses relevant to the project: NA E Detailing/Digital Detailing is defined as the use of electronic and interactive media that facilitates sales representatives on sales calls with Health Care Professionals(HCPs). This is now a well established method of increasing pharmaceutical company efficiency in customer engagement, hence helping to better analyse business performance. Through data management and data analytics, a Digital Detailing tool has been developed in R Shiny. From the given database, which includes data about the eSales calls made by sales reps to HCPs, this tool analyses all the Key Performance Indicators(KPIs). The tool then helps to understand the significance of the KPIs by placing them in a visual context i.e., in the form of various charts and graphs. Tool used (Development tools - H/w, S/w): Excel, SQL, R Objectives of the project: Design and develop a digital detailing tool for a global pharmaceutical company in the analysis of reach of eSales activities Major Learning Outcomes: 1. Obtained knowledge about how the pharmaceutical sector works 2. 2019-Learnt how to build a digital detailing tool using R and R Shiny. 3. Learnt about marketing and promotional Genpact, Bangalore 20strategies in the healthcare domain Details of Papers/patents: Brief Description of working environment, sem1 expectations from the company: The organisation provided with a healthy learning environment to pick up skills required in the field of Data Analytics, such as SQL and R. I was exposed to the pharmaceutical domain for the first time and learnt a lot about what marketing and promotional strategies are utilised in this sector. All the team members, especially the manager, we're extremely helpful and supportive throughout the intership period. Academic courses relevant to the project: Pharmaceutical Management and Quality Control, Pharmacoeconomics and C programming. Brief write-up on PS-II station: The expectation from this station is that students should possess knowledge of marketing concepts with focus on Digital Marketing, R, Power BI, Python, MySQL. In addition to these, students need to possess communication skills and presentation skills. The learning outcome is that the students will have a broad understanding on Digital Marketing and Marketing Analytics Student

Company	Experience	Year
Genpact, Bangalore	The aim of the first project was to evaluate a data science platform XYZ* by building a customer churn model for the client's platform using platform data from 2015-2018. Data understanding, Exploratory Data Analytics (EDA), Data cleansing, Feature engineering and Modelling steps were performed. The aim of the second project was to develop graph analytics techniques using advanced graph theory algorithms to support and execute Anti-Money laundering (AML) operations. Transactional dataset of account holders of a major bank was used to flag fraudulent/money laundering transactions using graph analytics. Tool used (Development tools - H/w, S/w): Machine Learning, Graph theory, Graph Algorithms, Graph DBMS, Python Objectives of the project: *Exploring Graph theory, Graph analytics techniques and its applications for community, influencer identification, and for influencer identification , and for supporting Anti Money Laundering operations. *Building machine learning models to meet the requirements of the client *Evaluating and shortlisting data science platforms to be used by the organization Major Learning Outcomes: *Very valuable insights on churn modelling and business side of the client *Detailed understanding of data preprocessing and processing steps along with their implementation *Anti-money laundering and its crucial role in an organization *Getting equipped and skilled in python and other analytics tools/platforms Brief Description of working environment, expectations from the company: The managers allotted for the PS-2 from Genpact are senior data scientists and are hence very experienced. They are very helpful and working under them will surely help you learn a lot. The only thing you need to show is your interest to learn new things. You can take multiple projects which will contribute immensely to your resume and will definitely help you apply for similar roles off-campus/oncampus. The projects are research driven based on upcoming technology in data science hence there's a lot of demand for such rol	2018- 19- sem1
Genpact, Bangalore	Researched into Reinforcement Learning for the company's needs and developed a product for the same Tool used (Development tools - H/w, S/w): Python Objectives of the project: New Tool development Major Learning Outcomes: Machine Learning, Data Science, Project handling Brief Description of working environment, expectations from the company: Company expects deadlines to be met, no excessive pressure. Positive work environment. Academic courses relevant to the project: Machine Learning Name: Arpit gautam (2015ABPS0639H)	2018- 19- sem1
Genpact, Bangalore	Cleansing the data, Analysing the data and doing RCA(s). Tool used (Development tools - H/w, S/w): Excel and Tableau. Objectives of the project: Data analytics. Major Learning Outcomes: Understanding the data improved. Learnt new tool. Brief Description of working environment, expectations from the company: Employees are nice, no such pressure was being put on us regarding the work. Help and guidance were provided on regular intervals. Academic courses relevant to the project: Lean and Supply chain. Name: Aishwarya Karunakar (2014B4A30554H)	2018- 19- sem1
Genpact, Bangalore	Part of Data science team at Genpact. Worked on deploying deep learning models for use cases in Computer Vision applications. Tool used (Development tools - H/w, S/w): Python Objectives of the project: Build deep learning models for CV applications Major Learning Outcomes: Deep Learning, Computer vision Brief Description of working environment, expectations from the company: Working environment is stable with lots of opportunities to learn different aspects of data science with a variety of use cases to work on. Academic courses relevant to the project: Machine learning, statistics, Digital image processing, Optimization Name: Nishant Yadav (2015A8PS0527G)	2018- 19- sem1
Genpact, Bangalore	I was working on speech analytics (emotion detection specifically) and back-end development for an existing speech analysis pipeline (which in real time tries to capture the sentiment and emotion of the speaker) developed by Genpact. I had to write an algorithm which could perform emotion classification (among happy, sad, neutral and angry emotions) on the various audio inputs given. One of the particular use case of the project is in call centers (to analyze the customer emotions to enhance customer satisfaction). Tool used (Development tools - H/w, S/w): Python, Flask Objectives of the project: To write an algorithm for emotion detection and to make a REST API for the pipeline. Major Learning Outcomes: Python and it's use to implement various machine learning approaches such as Neural networks, Logistic regression, Linear regression, KNN-classifier, Support vector machines. Apart from this the use of Flask (Web-micro-framework in Python) for back-end development. Brief Description of working environment, expectations from the company: Genpact has very cooperative and supportive employees and a very healthy work environment for interns. Regular team meetings are conducted to discuss progress reports of various team members. Company allows interns who are new to their respective fields of work ample time to learn, fit-in and adjust with the company procedures and ways of going about things. There are enough opportunities to learn and acquire new skills. Helpful mentors allotted to interns (depending on their project) and negligible work pressure adds to the productivity. Academic courses relevant to the project: Neural Networks an fuzzy logic. Name: Aditi (2015B4TS0924P)	2018- 19- sem1

Company	Experience	Year
Genpact, Bangalore	I made a chat bot Tool used (Development tools - H/w, S/w): NodeJs, Python Objectives of the project: Chat Bot Development Major Learning Outcomes: Learned NodeJs, Python and machine learning. Used NLP, text mining, intent classification and entity extraction to make a chat bot Brief Description of working environment, expectations from the company: Work environment is decent, managers and mentors are really supportive. But the stipend offered by the company is really low compared to the work offered by them. Otherwise it's a really good experience work wise. Academic courses relevant to the project: Machine Learning Name: Chand Sethi (2014B1A10912G)	2018- 19- sem1
Genpact, Bangalore	Project 1: Migration of Forecasting code from R to Python and improving accuracy and speed of the model. Forecasting was done with Auto Arima and Neural Networks. Project 2: Improving run-time of non-linear optimization. Done by replacing in-built Scipy minimization with third-party optimizers. Tool used (Development tools - H/w, S/w): Anaconda/Python, RStudio Objectives of the project: Project 1: Migrate forecasting code from R to Python and improve accuracy and speed. Project 2: Improve run time of non-linear optimization. Major Learning Outcomes: R is better at statistical analysis and very specific packages are readily available but Python being a general purpose language has ecosystems built around it, which makes it a good candidate for data science applications. Brief Description of working environment, expectations from the company: Being a corporate company, there are a lot of delays expected during the set-up and troubleshooting but the work timings are flexible and the working environment is non-hectic. Name: Kaustubh Dusad (2015A1PS0619G)	2018- 19- sem1
Genpact, Bangalore	Learnt R programming, statistics, hive Hadoop etc. Built a UI(user interface) in Rstudio using shiny package to extract and map sales data and generate automated reports for clients using some UNIX codes Tool used (Development tools - H/w, S/w): RStusio, Hive, puTTy, Excel, PowerPoint, filezilla Objectives of the project: Building a UI to let user provide classification of sales data and generate automated reports for the samethus reducing the TAT(turnaround time) and manual work on the process which can lead to errors Major Learning Outcomes: Learnt R programmingwidely used in data analytics. Also learnt about the amount of data companies deal with and got a first hand experience for the same. Also learnt about softwares like puTTy, FileZilla etc. Brief Description of working environment, expectations from the company: Working environment is chill. Not much work load. No real adherent working hours(depends upon the teambut mostly 6-7 hrs). Employees are very humble and polite. Setup process takes a lot of time though. Good projects and good opportunities to learn about the analytics sector. Academic courses relevant to the project: C programming, Statistics Name: Manprit Singh (2015ABPS0866P)	2018- 19- sem1
Genpact, Bangalore	Reporting and Analysis of key performance indicators (KPIs) in Transportation Operations. Root Cause Analysis of underperforming metrics. Building and standardizing logic for all metrics. Forecasting Year To Go numbers using Year To Date numbers. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Consistent Weekly Reporting and Analysis of Transportation SLAs Major Learning Outcomes: Data preparation, standardization and reporting. Quality checks. Advanced excel. Basic Lean Training. Basic VBA and Python (minute - self study) Brief Description of working environment, expectations from the company: The working environment was quite decent with good managers and leaders. We were 3 interns amongst the quality team for the client. Our work wasn't optimum, in a way we were underutilised. The timings are quite flexible so you can leave early with permission as soon as your work is done. Overall, decent work with a decent atmosphere. Low pay grade. Academic courses relevant to the project: Supply Chain Management Lean Manufacturing Name: Tania Nandi (2015A5PS0932P)	2018- 19- sem1
Genpact, Bangalore	I have developed 2 tools as a Proof of Concept. Both had a Forecasting component using ARIMAX model. I was asked to write a white paper on one of the projects. Both of the projects was under the Healthcare and Lifesciences domain. Tool used (Development tools - H/w, S/w): R Studio and R shiny Objectives of the project: to develop tools in r studio environment as it is open source and a powerful language. Major Learning Outcomes: Coding and analytics in R. Application/Tool development Details of Papers/patents: White paper on Star Measure and Adherence Forecasting tool (project 1). to be published in the Genpact Internal environment. Technical as well as business paper highlighting the methodology, logic used to develop the tool, types of dataset used to test the tool and finally the scope of application across various sectors of Healthcare. Brief Description of working environment, expectations from the company: the working environment is very flexible. it helps you develop and learn things at your own pace. helpful colleagues who are ever ready to share their knowledge and good managers to guide you through the projects. Academic courses relevant to the project: statistics, C programming (only for understanding basics of coding) Name: Shivam Chaubey (2015D2TS0999P)	2018- 19- sem1

Company	Experience	Year
Genpact, Bangalore	During this internship period I was involved in work revolving around Data analytics, Retails, marketing, supply chain, CPG. I got an opportunity to understand the working principles of this area and be a part of the process. As i was part of two teams that were handling two different clients for Genpact. My project was concerned with "Consumer targeting and market segmentation Strategies". Tool used (Development tools - H/w, S/w): Microsoft Word, Excel, CAMEO (consumer segmentation system), Phython. Objectives of the project: Study of the existing Consumer targeting and segmentation methods. Identifying the limitations in them and coming up with new methods that counter those limitations. Major Learning Outcomes: Types of Segmentation methods used in current world of retails marketing. Different types and appropriate scenarios in which these methods are used. Limitations of each of the methods. Brief Description of working environment, expectations from the company: The working environment was every professional and friendly. Everybody in the office was welcoming and was willing to help and guide with an supportive and positive attitude. Academic courses relevant to the project: POM (Principles of Management), POE (Principles of Economics), C programming. Name: Ashish Gupta (2015A2PS0816P)	2018 19- sem1
Genpact, Bangalore	a comprehensive methodology to forecasting methods and to implement them in R using various R packages and different models to be put to use for forecasting such as Holtwinters which comprises of exponential and double exponential smoothening parameters and ARIMA models. Forecasting is a common statistical task in business, where it helps to inform decisions about the scheduling of production, transportation and personnel, and provides a guide to long-term strategic planning. An organization needs to develop a forecasting system that involves several approaches to predicting uncertain events. Such forecasting systems require the development of expertise in identifying forecasting problems, applying a range of forecasting methods, selecting appropriate methods for each problem, and evaluating and refining forecasting methods over time. It is also important to have strong organizational support for the use of formal forecasting methods if they are to be used successfully. This report also focuses on various packages for UI visual development in R such as R shiny which is the package for the application development in R Shiny is an R package that makes it easy to build interactive web apps straight from R. Standalone apps can be hosted on a webpage and dashboards can be built in a nutshell Shiny combines the computational power of R with the interactivity of the modern web. Shiny apps can also be extended with CSS themes, html widgets, and JavaScript actions and ggplot2 which is a package for the graphical visualization of time series data and its various trends and seasonality. Tool used (Development tools - H/w, S/w): R Objectives of the project: Developing a forecasting Tool for a client Major Learning Outcomes: got an extensive knowledge in R and big data analytics Brief Description of working environment, expectations from the company: Genpact has provided me with an excellent environment to learn and develop my skills. I have been provided with an exceptional project and all the aid and support I need. Howev	2018 19- sem1
Genpact, Bangalore	In the Healthcare and Life Sciences Department, Genpact provides Analytics and Research offerings to the client by aiding in secondary search. These services vary from literature and patent searches, AUP requests, white paper requests, to competitive intelligence searches. These services help the client in further discovery and development of new drugs, patent filings and regulatory approvals which helps in decision making for mergers, acquisitions and collaborative opportunities. Tool used (Development tools - H/w, S/w): Microsoft Office Tools Objectives of the project: Seconday Research for a Pharmaceutical Company Major Learning Outcomes: Interning at Genpact helped me gain experience in client dealing and negotiations. I got equipped with database management in secondary research specific to the client's business needs. It gave me an opportunity to handle an international client and hence has helped me develop my communication skills tremendously. Academic courses relevant to the project: Pharmacoeconomics, Biochemistry, Pharmacology, Molecular Biology Name: Tarush Gupta (2015A2PS0643P)	2018 19- sem <sup>*</sup>

Experience Year Company The principal part of my project involved us learning the various services provided by the company to their clients and automate them using transformation techniques. Therefore as part of this assignment I designed a self learning neural network which would forecast sales for a major global manufacturer and thus try to estimate the optimum inventory supply for the manufacturer to distribute among retailers. Tool used (Development tools - H/w, S/w): Python Objectives of the project: For this process I received point of sale data from the company which I analysed to determine causal trends like seasonality and ad promotion impact. The data was aggregated weekly and fed as input to determine a forecast independent of trends and causal factors. The trends and causality was then inputed as a bias node to the network to modify specific weights pertaining to specific months where the trend was valid to give us a final market to date forecast which factored retail market condition. Major Learning Outcomes: This work opportunity with 2018-Genpact has been a great learning experience in an industry in which I previously had very little experience. Genpact, Bangalore 19-I have learned the inner workings of a data services firm and the various different tasks performed by the sem1 numerous departments here. Brief Description of working environment, expectations from the company: The experience here has been greatly beneficial to my academic development allowing me to gain crucial exposure in an industry with limitless applications to global markets of different types. I have learned the various insights which can be gained by analyzing different types of data for different indicators crucial to the success of that business. Academic courses relevant to the project: Machine Learning Tool used (Development tools - H/w, S/w): Neo4j Graph Database, Elastic Search, Pandas Objectives of the project: Deduplication of supplier data Major Learning Outcomes: Machine Learning, Python, Graph Theory, Graph Databases Details of Papers/patents: The project will be filed for patent. Brief Description of working environment, expectations from the company: Extremely supportive and led by a visionary. Academic courses relevant to the project: Machine Learning, Graph Theory Name: Ayush Sharma (2015A3PS0240G) A healthcare brand was assigned as a client, with an objective of increasing the qualification of its leads(which eventually get converted to an assessment) across 5 major cities in which it was offering its services. This began by understanding the digital marketing aspect of this and how the lead journey happens on an overall basis. Google Search campaigns were run in order to get leads on a daily basis as these help in showing the website in the top 3 results. These campaigns were optimized on a daily basis after an analysis of its performance in the preceding day. This analysis was possible with the help of daily tracker, insights tracker and ad-group level tracker that were set-up on google sheet, wherein the customer data and google Ads data was added on a daily basis; which then went through some set formulas to show us the daily performance of the campaigns in terms of spends, impressions, clicks, CTR, CPC, Leads, CPL etc. The client gave the targets on a monthly basis and 80-90% of them were achieved on an average. Tool used (Development tools - H/w, S/w): Google sheets, Google Ads, Google Analytics, 2019-GenY medium, Hyderabad Amazon Marketing Services, Facebook Ads Manager, SEMrush, Moz etc. Objectives of the project: To 20increase the qualification for the leads in a healthcare brand Major Learning Outcomes: Learned about sem1 how digital marketing works and its various applications in different channels such as google, facebook, instagram, amazon etc. Learned how lead journey happens from the lead creation, lead nurturing and to a possible conversion. Excel, goog Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment was great. Everyday you get to learn something new. Tasks were assigned from day 1 and you were given ample amount of time to complete them. Most of the tasks were interesting while some were a bit tedious. All in all, a great experience if you want to learn something different and new. The company expected you to be accountable for the work you do. Your work was recognized and appreciated well. And you were contributing from day 1 with your work, towards the company. Academic courses relevant to the project: There was not any academic course related to the project which was done in the area of digital marketing. I worked as a digital marketing analyst and also an active member in the business development team to increase the online traffic/sessions and generate more leads and conversions for the clients/B2B/B2C. Major working parts were SEO, SEM, SEO audits, backlinking, etc Tool used (Development tools - H/w, S/w): SEMrush, Moz, Google Analytics, Google Search Console, forestry.io, WordPress, SimilarWeb, Google PageSpeed Insights, MS Excel/MS Word/MS PowerPoint, Facebook Ads Manager, Google AdWords, Google SEARCH/DISPLAY/Youtube Campaigns, Keyword Planner Objectives of the project: The objective behind 2019this project is to generate ideas, initiatives & activities that are aimed towards making a business better GenY medium, Hyderabad 20and, create long-term value for an organization from customers, markets and relationships. Major Learning sem1 Outcomes: Search Engine Optimization, Business Development, ON Page SEO, OFF Page SEO, Competitor Analysis, Digital Marketing Analytics Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Principles Of Management Brief write-up on PS-II station: Essential prerequisite courses required before working on the project Python OOPS and Data structure Python, Pyspark, Azure Data Factory, SSMS OOP, NNFL DBMS, course that deals with Apache Spark and Data Bricks Student

Company	Experience	Year
GEP , Navi Mumbai	I was assigned to the Data Engineering team within the Data Science Dept. of GEP. During the course of my internship, I worked on 3 projects. The first was a short python script project for reading the data and uploading it to SQL server. The second was from Data Science which was geography normalization which required various forms f fuzzy string matching and the final one was from Data Engineering team again, which was data development and enrichment for a chat bot. PS - You may be assigned to Data Science dept. but that won't guarantee a Data Science project as was in my case. Tool used (Development tools - H/w, S/w): Pyhton, SQL, Spark, Azure Data Bricks, Azure Data Flow Objectives of the project: ETL pipeline for Chatbot Major Learning Outcomes: Spark Details of Papers/patents: Brief Description of working environment, expectations from the company: GEP has an awesome work culture and friendly people who guides you through your projects and tasks. Most likely you won't be assigned a mentor and you would be the part of team from day 1. You will get a proper corporate experience and will have an idea what the life of an programmer is like in the industry. Academic courses relevant to the project: DBMS, Machine Learning Student	2019- 20- sem1
GEP INC, MUMBAI	The project that I worked on was a chain of several engines including a computer vision component (optical character recognition engine) and an NLP engine which essentially encompasses a pipeline of text data transformations. Tool used (Development tools - H/w, S/w): Tesseract OCR, SpaCy — Python, Julia.  Objectives of the project: Goal of the project was to extract information from contracts that have non selectable text, process and bring out insights from the content Major Learning Outcomes: Knowledge about Deep Learning, Data Mining, Natural Language Processing, Computer Vision, Metaprogramming.  Brief Description of working environment, expectations from the company: I was a part of Data Science Team at GEP Mumbai — which has members from various parts of the world — US, Spain, IIT Bombay, IIT Jodhpur, etc to name some. Work environment is pretty great — we worked directly under Senior Director of Data Sciences and were treated like a responsible employee because of which all of learned a lot. Environment is pretty informal and honest. It's really OK to know nothing about data science and join this team because there's a healthy knowledge sharing environment already in place within the team. Company expects someone with a will to learn and deliver Academic courses relevant to the project: Data Science team is small — around 8 people, with 15 projects distributed among them — from Big data to natural language processing, OCR, deep learning, chatbots to what not. Courses that are taught in campus are too much theory oriented in comparison. So it's better to explore some practical data science content online rather than relying on too much theory. In theory there's no difference between practice and theory, but in practice there is. Name: Alanckrit Jain (2015A8PS0327P)	2018- 19- sem1
GEP INC, MUMBAI	I worked on two projects, both related to Machine Learning. One was based on short text classification and using of different modelling techniques to predict results on numerous parameters of clients' data. The other was based around identifying and removing similar duplicates of names in Data. Basic skills of Python were enough to start off with and necessary softwares and libraries were picked up along the way, as and when required. Tool used (Development tools - H/w, S/w): Microsoft Azure, Pandas, Elasticsearch, SQL Objectives of the project: To develop an AI based Spends Classification Engine Major Learning Outcomes: Learned to use elastic search and handle big data through it. Refined skills if python along with learning numerous modelling techniques and their usage. Details of Papers/patents: A patent on Deduplication engine to be published soon Brief Description of working environment, expectations from the company: The best and most professional work culture you'll find. A brilliant team to work with, providing enough space to innovate and be creative as well as getting an experience of working in a corporate. Academic courses relevant to the project: DSA, DM, ML, Statistics	2018- 19- sem1
GGK Technologies - Data Analytics, Hyderabad	Data science and Machine learning. Analyzing and visualizing customer behavior from data and predicting churn for customers. Tools used (Development tools - H/w, S/w): R programming, python Objectives of the project: Predict churn for customers Outcomes of the project: classification model based on transaction data and website activity Major Learning Outcomes: effective handling of class imbalance, proper ML model building, prudent algorithm selection Brief Description of working environment, expectations from the company: Very interesting and food working environment. Expecting more inputs from the company than present. Academic courses relevant to the project: Machine learning, Artificial Intelligence, Statistical Inference and Applications.	2017- 18- sem1

Company	Experience	Year
GGK Technologies - Data Analytics, Hyderabad	We started out with studying statistics and machine learning. Later on, we applied these concepts on kaggle datasets to get hands-on experience. After that we got projects to work on. My project was churn out prediction of VIP customers of an online fashion retailer. I handled the whole pipeline of predictive modelling including getting relevant data, data profiling, cleaning and processing, feature engineering and finally creating different machine learning models. Tools used (Development tools - H/w, S/w): R, Python Objectives of the project: Predictive modelling for e-commerce customer's churn out. Outcomes of the project: Got good prediction accuracy from the classification model. Major Learning Outcomes: Learnt statistics and machine learning and applied them on real data, handled the whole pipeline of predictive modelling. Brief Description of working environment, expectations from the company: I was in the data science team which was very new in the company. So they initially put a lot of efforts in making us learn data science which was actually very helpful. And after that they wanted each of us to complete the POCs and that too with good prediction accuracies, so that they can showcase it to the clients ASAP. But overall, the learning was amazing. Academic courses relevant to the project: Machine Learning, Data Mining. Student	2017- 18- sem1
GGK Technologies - Mobile App Development, Hyderabad	Development of Internal Application for Organisation. Online Examination Tools used (Development tools - H/w, S/w): Angular 5, GoLang, PostgresSql Objectives of the project: To develop an Online Assessment System Outcomes of the project: A working product Major Learning Outcomes: New Technologies like Angular, Hosting, Web Network calls Brief Description of working environment, expectations from the company: The working culture is awesome. Employees were given chance to learn new technologies without any pressure Academic courses relevant to the project: DBMS Student	2017- 18- sem1
GGK Technologies - Mobile Services, Hyderabad	App development Tools used (Development tools - H/w, S/w): angular 2 Objectives of the project: development of a platform to update and store employee data Outcomes of the project: incorporation of new tabs on the employee database platform Major Learning Outcomes: angular 2, devOps, database management Brief Description of working environment, expectations from the company: friendly Student	2017- 18- sem1
GGK Technologies, Hyderabad	Web automation Test Suite. Identify some test scenarios, automate them and generate reports for the success or failure of the functionalities of the web service portal. And conclude about the working of the Web service portal. Tool used (Development tools - H/w, S/w): S/w: Selenium. Programming Language: Java Objectives of the project: QA Testing. Test the web service portal of the company Major Learning Outcomes: basic OOP concepts, like inheritance, encapsulation, abstraction, etc. Got acquainted with basic java programming language, Selenium automation tool. Brief Description of working environment, expectations from the company: ultimately, communication with the manager mattered a lot to understand the proper expectations in the project work. Should not hesitate at all to ask our queries at any point during the PS 2 program. Company expects us to learn the skill and apply properly. If not able to cope up, it was very important to communicate and clarify the expectations of theirs from the beginning. Mainly, hard work mattered. Academic courses relevant to the project: mainly Object Oriented Programming. Name: Mudit Gattani	2018- 19- sem1
GGK Technologies, Hyderabad	Creating a data preparation tool via wxPython which parses large size files, pushes it into Database(HBase) and provides an option for the user to do suitable operation(cleansing, editing etc.). Tool used (Development tools - H/w, S/w): WxPython, HBase Objectives of the project: Building data preparation tool Major Learning Outcomes: Python, SQL, MongoDB Brief Description of working environment, expectations from the company: Company suitable for students who are not from Computer Science and want to enter in IT domain. Company is in expanding phase. Academic courses relevant to the project: Objective Oriented Programming Name: Kaushik Mour (150855)	2018- 19- sem1
GGK Technologies, Hyderabad	For the first 2.5 months I was given training on MongoDB and told to learn Python, Python GUI. I am working on developing a data cleansing and preparation tool. Tool used (Development tools - H/w, S/w): Python, SQL, Python GUI Major Learning Outcomes: Python, SQL Brief Description of working environment, expectations from the company: The projects were not completely finalized by the company. They still had ambiguity as to exactly what they wanted. It did provide you time to learn topics at your own pace but someone who is not interested in working in IT field will have trouble coping here. Not all the projects were fruitful. Some of them were just given to keep the student occupied. Name: Harika Trikutam	2018- 19- sem1
GGK Technologies, Hyderabad	Web development and automation testing Tool used (Development tools - H/w, S/w): S/w- Ruby on Rails, Selenium Objectives of the project: To complete the tasks given to me such that my work doesn't interrupt others' working in my team Major Learning Outcomes: I learnt how to create and modify an application in Ruby on rails Academic courses relevant to the project: Java, Cryptography Name: Katyayan aanand (2014B1A80724G)	2018- 19- sem1

Company	Experience	Year
GGK Technologies, Hyderabad	Development and Selenium Automation testing Tool used (Development tools - H/w, S/w): Ruby on rails, HTML, CSS, JAVA Objectives of the project: Live project Major Learning Outcomes: Learnt Development and automation testing Academic courses relevant to the project: CP Name: AISHWARY JOSHI (2014B1A40633H)	2018- 19- sem1
GGK Technologies, Hyderabad	The duration was Practice school hovered over two technical oriented and one business oriented concepts. Firstly, Data Analytics, where data from a renowned food chain was used to predict sales using previous trends spread annually and chalking out the key time period where sales were maximum. Following work was in the field of Business development where wireframes, mock-ups were created using the Functional requirements as per the client needs. The last section of training comprised of Structured Query Language, used in Database Management systems. Tool used (Development tools - H/w, S/w): Python Jupyter, SQL, Powerpoint Objectives of the project: POC, Live project, Training Major Learning Outcomes: Python Script, Data Analytics, Business development Name: Jyoti Vishnoi (2015A7PS0013P)	2018- 19- sem1
GGK Technologies, Hyderabad	MY project was mainly on web development. I was a part of a team of 20 members and the objective of the application was to help hospital staff in keeping track of patient's health and show the risk factor(if any for his/her health issue). My contribution was in Angular application(front end framework). Tool used (Development tools - H/w, S/w): visual studio, TFS, Azure. Objectives of the project: analysis of patient's health Major Learning Outcomes: Angular, Agile methodology Name: Aniket Agrawal (2014B2A40133P)	2018- 19- sem1
GGK Technologies, Hyderabad	Web services Automated Testing Tool used (Development tools - H/w, S/w): S/w - Selenium, Java Objectives of the project: Development of Automated Testing Framework Major Learning Outcomes: Basic Programming Brief Description of working environment, expectations from the company: Don't keep any expectation from this company, if you are lucky you'll be allotted a project otherwise you'll have to spend 6 months 8.5 hours a day doing nothing. On the other hand this gives you lot of time to study for placements. Name: Debasmita Singha (2014A7PS0001P)	2018- 19- sem1
GGK Technologies, Hyderabad	User Experience research and visual design for different clients (Pair Up, Medforce, Lego) Tool used (Development tools - H/w, S/w): Photoshop, Axure, Adobe XD, Sketch Objectives of the project: To make the app or website more user friendly Major Learning Outcomes: Learned that your users are the ones that can make or break your company and it's important that every thing you create should be centred around them Brief Description of working environment, expectations from the company: Working environment is good, it can be improved. They have a strict timing of compulsory 8.5 hours everyday which is not necessary Academic courses relevant to the project: Performance design Name: Akshat Mishra (2014B1A20562P)	2018- 19- sem1
GGK Technologies, Hyderabad	Worked as a Business analyst on a healthcare project and worked on a POC on Restaurant Email marketing by building a recommendar systems using ML algos Tool used (Development tools - H/w, S/w): SQL, Python, Machine learning, C++, VBA. Objectives of the project: Business analysis and Email marketing Major Learning Outcomes: Business Development, Data science, Data analytics Brief Description of working environment, expectations from the company: GGK Technologies, Hyderabad was allotted to students who wanted to have a first hand experience on how an IT company works like. This company gave all of us the exposure as most of us were from Non CS background. Proper time was given for training and subsequently we were allotted to different projects and and if anyone wanted to shift from one project to another one, they were allowed to do so. Basically, it was overall a good company if you are starting and want to start your career in IT industry. Working environment was a bit hectic, they wanted us to work us more as they were paying more in just an internship. Overall from learning prospective, a nice company situated in uppal, gachibowli and kokapet offices spread around in Hyderabad Academic courses relevant to the project: Machine learning, C programming, Data structures and Algorithms Name: R.Nirmal Sai Kuldeep	2018- 19- sem1
GGK Technologies, Hyderabad	Worked as a full stack Developer Tool used (Development tools - H/w, S/w): Java, AngularJS, Html Objectives of the project: Our Project is about a web Application For Hospital Management Major Learning Outcomes: Got Experience of Working in Office Academic courses relevant to the project: OOPS Name: Tanveer Singh Hora (2015AAPS0253H)	2018- 19- sem1
GGK Technologies, Hyderabad	Ethereum blockchain based project which included smart contract code writing, UI/UX design and POC. Also worked with Hyperledger blockchain. Tool used (Development tools - H/w, S/w): Truffle framework, Ganache, Solidity, Angular, Bootstrap, Hyperledger Composer Objectives of the project: Implementing smart contract, creating website platformand POC for client project Sportist Major Learning Outcomes: Blockchain and its applications, UI/UX design Academic courses relevant to the project: OOPS, Cryptography Name: Mohit Parashar (2015A2PS0540H)	2018- 19- sem1

Company	Experience	Year
GGK Technologies, Hyderabad	Worked on an internal project of making a question answer interface for the company like Stack Overflow using ReactJS and Redux. Tool used (Development tools - H/w, S/w): ReactJS, Redux Objectives of the project: Was to make a company specific question answer platform Major Learning Outcomes: Application of front end languages like java script, React java script, react-redux etc.	2018- 19- sem1
GGK Technologies., Hyderabad	Web application Development Tools used (Development tools - H/w, S/w): React js ,node Objectives of the project: To develop Web application using React Outcomes of the project: Developed Web applications Using react Major Learning Outcomes: React Js + Redux, node , Ruby , Webpack Brief Description of working environment, expectations from the company: Working environment is good , people are friendly here . KAUSTUBH (2013A3PS255P)	2016- 17- sem1
GGK Technologies., Hyderabad	Web application Development Tools used (Development tools - H/w, S/w): VS 2015, .Net, Angular2 Objectives of the project: Develop HRMS application for internal use. Outcomes of the project: Created and enhanced HRMS app. Major Learning Outcomes: .Net core concepts and basics of full stack application development. Brief Description of working environment, expectations from the company: Amazing experience. SAHIL (2013A3PS288P)	2016 <sup>-</sup> 17- sem1
GGK Technologies., Hyderabad	Worked in the project that is related to healthcare domain. We designed an application that manages all the aspects of a hospital's operation. Tools used (Development tools - H/w, S/w): iReport Designer, java, angularjs Objectives of the project: HIMS software Outcomes of the project: Building an end to end integrated HIMS Major Learning Outcomes: angularjs, jasperrepotrs Brief Description of working environment, expectations from the company: Friendly environment, good place to work. KAMPARA SATYA NAGA JAGADEESH (2013A3PS320P)	2016- 17- sem1
GGK Technologies., Hyderabad	My work was based on web development. i was asked to learn about the new technologies and frameworks like angular 2 ,SASS and Material design Lite and was assigned to work on creating User Interfaces of different modules in various projects. My majority of the work was on front-end side which i found was interesting and was were keen on asking for work and doing it which i enjoyed a lot. Tools used (Development tools - H/w, S/w): Angular 2, MDL, SQL Server, Visual Studio, VS Code, BLISK, Server Lite Objectives of the project: The Project was to provide Quality Assurance team with a web application to Show Case their test results to clients and enable the clients to test their application built by the organization Outcomes of the project: The outcomes of the project were to design and architect a project and how to use and combine different technologies together to get a efficient and faster results and got good knowledge on User Interface and front-end side technologies. Major Learning Outcomes: The Major Learning Outcomes Were Sound and Profound Knowledge on Front-end Technologies like angular 2 and Material Design Lite Frameworks. Brief Description of working environment, expectations from the company: The work environment in GGK technologies is very healthy and mature. It is a very good place to start your career in Information Technology Sector as they are constantly deprive to renovate themselves towards the new upcoming technologies and the mangers and mentors have a very healthy relationship with every employee and constantly help them in reaching their goals and help the employees to update them in new technologies. The company expects outcome from students which is as same as the employees working there which i feel is good for the student to navigate him to right direction as it drives him to learn harder. We were even assigned to learn new technologies and implement them in the projects which was a good move in boosting our morale. I would like to conclude with one last statement about the work envir	2016- 17- sem1
GGK Technologies., Hyderabad	Automation of Software Delivery pipeline ,Worked as a DevOps engineer and Linux administrator Tools used (Development tools - H/w, S/w): Ansible ,Git,HAproxy,Jenkins ,TravisCl and Puppet Objectives of the project: Zero Downtime deployment of a web application Outcomes of the project: Building and deploying SpringMVC java app on AWS servers Major Learning Outcomes: Python ,Scripting and Devops tools Brief Description of working environment, expectations from the company: We had transparent & open communication ,they provided various trainings on new and old technologies and we used to have fun activities and yoga sessions every Friday. JACOB JOSE (2012B1AA707H)	2016 <sup>.</sup> 17- sem1

Company	Experience	Year
GGK Technologies., Hyderabad	Worked on three POCs related to Machine Learning and Natural Language Processing. In the first POC, built a search index around shared files so that users could search based on the contents of the documents. In the second POC, made an application that could process clinical reports in order to get insights into patient health and current condition. Built a recommendation engine in Python in the last POC. Tools used (Development tools - H/w, S/w): Java, Python, MongoDB, Apache Solr Objectives of the project: Completion of various POCs in order to expand understanding of various subareas of Artificial Intelligence like Machine Learning and Natural Language Processing. Outcomes of the project: Made an application that could process and analyze clinical reports in order to obtain insights into patient health. Also, built a recommendation engine in Python. Major Learning Outcomes: Learned about Apache Solr, Apache OpenNLP and MongoDB. Brushed up on programming concepts and patterns with Java and Python. Brief Description of working environment, expectations from the company: The working environment was very welcoming and encouraging. Explored completely new technologies and algorithms. Overall, it was a great experience. AAHLADITHA GANDHE (2012A7PS080H)	2016- 17- sem1
GGK Technologies., Hyderabad	Data science algorithms implementation Tools used (Development tools - H/w, S/w): R Studio,Python,Ubuntu Objectives of the project: Business Intelligence for applications of machine learning algorithms to increase sales. Outcomes of the project: We were able to pitch in new clients with my POCs Major Learning Outcomes: Python,R programming,ubuntu,algorithms Brief Description of working environment, expectations from the company: The company was very good and helped us learn a lot.Learning environment has helped us learn more with a cool mind. Best PS ever. Mentor Designation: Founder & CEO The Company is mainly into developing a product of its own using machine learning algorithm implemented using Python. Although all the interns were new to the technology, still they picked it up quickly. The BITS interns are dedicated and have an out-of-the-box thinking. Student	2016- 17- sem1
GGK Technologies., Hyderabad	Web application Development Tools used (Development tools - H/w, S/w): React js,node Objectives of the project: To develop Web application using React. Outcomes of the project: Developed Web applications using React. Major Learning Outcomes: React Js + Redux, node, Ruby, Webpack Brief Description of working environment, expectations from the company: Working environment is good, people are friendly here.	2016- 17- sem1
GGK Technologies., Hyderabad	Web application Development Tools used (Development tools - H/w, S/w): VS 2015, .Net, Angular2 Objectives of the project: Develop HRMS application for internal use. Outcomes of the project: Created and enhanced HRMS app. Major Learning Outcomes: .Net core concepts and basics of full stack application development. Brief Description of working environment, expectations from the company: Amazing experience.	2016- 17- sem1
GGK Technologies., Hyderabad	Worked in the project that is related to healthcare domain. We designed an application that manages all the aspects of a hospital's operation. Tools used (Development tools - H/w, S/w): iReport Designer, java, angularjs Objectives of the project: HIMS software Outcomes of the project: Built an end to end integrated HIMS Major Learning Outcomes: angularjs, jasperrepotrs Brief Description of working environment, expectations from the company: Friendly environment, good place to work.	2016- 17- sem1
GGK Technologies., Hyderabad	My work was based on web development. I was asked to learn about the new technologies and frameworks like angular 2,5ASS and Material design Lite and was assigned the work of creating User Interfaces of different modules in various projects. My majority of work was on front-end side which I found to bevery interesting. Tools used (Development tools - H/w, S/w): Angular 2, MDL, SQL Server, Visual Studio, VS Code, BLISK, and Server Lite Objectives of the project: The project was to provide Quality Assurance team with a web application to showcase their test results to clients and enable the clients to test their application built by the organization. Outcomes of the project: Designed and architected a project bycombining different technologies together to get faster results and got good knowledge on User Interface and front-end side technologies. Major Learning Outcomes: The Major Learning Outcomes were sound and profound knowledge on front-end technologies like angular 2 and Material Design Lite Frameworks. Brief Description of working environment, expectations from the company: The working environment in GGK technologies is very healthy and mature. It is a very good place to start your career in Information Technology sector as they constantly strive to renovate themselves towards the new upcoming technologies. The managers and mentors have a very healthy relationship with every employee and constantly help them in reaching their goals and in updating them with new technologies. The company expects results from students which are as same as for the employees working there, which i feel is good for the student to navigate in the right direction as it drives him to learn harder. We were even assigned to learn new technologies and implement them in the projects which was a good move in boosting our morale. I would like to conclude with one last statement about the working environment that the employees here have a good bonding with each other and are friendly in nature. They helped us in each and every step throug	2016- 17- sem1

Company	Experience	Year
GGK Technologies., Hyderabad	Automation of software delivery pipeline, worked as a DevOpsengineer and a Linux administrator. Tools used (Development tools - H/w, S/w): Ansible, Git, HAproxy, Jenkins, Travis CI and Puppet. Objectives of the project: Zero Downtime deployment of a web application. Outcomes of the project: Building and deploying Spring MVC java app on AWS servers. Major Learning Outcomes: Python, Scripting and Devops tools. Brief Description of working environment, expectations from the company: We had transparent & open communication. They provided various trainings on new and old technologies and we used to have fun activities and yoga sessions every Friday.	2016- 17- sem1
GGK Technologies., Hyderabad	Worked on three POCs related to Machine Learning and Natural Language Processing. In the first POC, built a search index around shared files so that users could search based on the contents of the documents. In the second POC, made an application that could process clinical reports in order to get insights into patient's health and current condition. Built a recommendation engine in Python in the last POC. Tools used (Development tools - H/w, S/w): Java, Python, MongoDB, Apache Solr Objectives of the project: Completion of various POCs in order to expand understanding of various subareas of Artificial Intelligence, like Machine Learning and Natural Language Processing. Outcomes of the project: Made an application that could process and analyze clinical reports in order to obtain insights into patient's health. Also built a recommendation engine in Python. Major Learning Outcomes: Learnt about Apache Solr, Apache OpenNLP and MongoDB. Brushed up programming concepts and patterns with Java and Python. Brief Description of working environment, expectations from the company: The working environment was very welcoming and encouraging. Explored completely new technologies and algorithms. Overall, it was a great experience.	2016- 17- sem1
GGK Technologies., Hyderabad	Data science algorithms implementation Tools used (Development tools - H/w, S/w): R Studio,Python,Ubuntu Objectives of the project: Business Intelligence for applications of machine learning algorithms to increase sales. Outcomes of the project: We were able to pitch in new clients with my POCs Major Learning Outcomes: Python,R programming,Ubuntu,algorithms Brief Description of working environment, expectations from the company: The Company was very good and helped us in learning a lot. Best PS ever.	2016- 17- sem1
GGK Technologies., Hyderabad	Front-end development of a health care product. Tools used (Development tools - H/w, S/w): Angular-JS Objectives of the project: Development of a health care product Outcomes of the project: Health care product Major Learning Outcomes: Angular JS Brief Description of working environment, expectations from the company: 8.5 hours of work required. PPO chances are high. Faculty Comments: Expectations from industry: Expectations from the industry - Students are expected to have fair knowledge in embedded systems, robotics, VLSI projects, MATLAB and Labview Student	2016- 17- sem1
Global Logic, Bangalore	Over the last 5.5 months I've had the privilege of interning with Global Logic, Bangalore. The working environment and the employee-intern relationship were commendable and are definitely things to be mentioned explicitly. My time there completely transformed my theory backed mind in to a more practical one. Speaking about my work there, I got a chance to develop an IoT platform that lets connected devices easily and securely interact with cloud applications and other devices. The platform makes it easier to ingest incoming data from devices using standard gateways and protocols like MQTT and HTTPS. I essentially worked on developing a device network using standard protocols, which is responsible for the entry of data through the help of sensors. The internship was a good learning experience. The theoretical knowledge I have, has been put into practice. But more importantly, the understanding of working as a team, being committed to your work was the most important take away from the experience. I must say those 5.5 months really helped me look beyond the academics, made me more result oriented and taught me how to get things done in a short period of time. The PS experience will definitely augment my future career prospects because now I know the skill set required by those companies and I will be able to develop them. Getting to learn about the company culture and etiquette is yet another bright side of my time there.	2015- 16- sem1
GOLDMAN SACHS	Played the role of a Project Manager/Business Analyst. Instead of working on one main project, I had the opportunity to work on several different projects in different domains. The work also involved data blending. Tool used (Development tools - H/w, S/w): Alteryx, Tableau, Excel Objectives of the project: Trade Harmonization Across Europe Major Learning Outcomes: Project Management Skills, Corporate Culture Brief Description of working environment, expectations from the company: Working environment is good. Working hours may extend upto 10-11 hours per day. Academic courses relevant to the project: Financial Management Name: Arihant Ranka (2015A1PS0653P)	2018- 19- sem1
GOLDMAN SACHS	Robotic Process Automation and Business Intelligence Tool used (Development tools - H/w, S/w): Automation Anywhere Objectives of the project: Bot Development Major Learning Outcomes: BUSINESS analyst tools Name: Aakash Aggrawal (2015A1PS0770P)	2018- 19- sem1

Company	Experience	Year
GOLDMAN SACHS	Worked for independent review of Equity derivative structured trades. Tool used (Development tools - H/w, S/w): Excel, GS internal softwares Objectives of the project: Reduce operational risk Major Learning Outcomes: Derivatives Brief Description of working environment, expectations from the company: Team environment was excellent. Name: Chitra (2015B3TS0967P)	2018 19- sem1
GOLDMAN SACHS	It seems only last week I was collecting my ID from Goldman Sachs and now PS-2 has come to an end. These past 5 months have flown by and I will not forget the lessons I learnt here. I interned in the Operations Division of the firm, in the Securitized Products Services team. In the beginning, I was unsure about how to carry myself in a corporate environment, that too in a corporate giant such as Goldman Sachs. The first few weeks I spent observing carefully my team, how they carry themselves and commit to their work. It didn't take as long as I expected to blend into the corporate environment. The Goldman experience helped me understand how the corporate world looks and works like. It helped me apply my technical knowledge to practical scenarios, transitioning from learning in college to application in the firm. This was my first internship where my work had an important role to play in the day-to-day performance of the team. The learning curve for the first few weeks was very steep and I was trained on the day to day function of the team. I had to make sure that all the legal documents needed for a trade to happen are in on time and they have been approved by the reviewing teams. I also had to ensure that all the trades are executed on time according to different deadlines of different markets and correctly. In addition to day-to-day functions. That helped me learn about how the trader commission account is maintained and how we maintain a journal of different transactions. There were no special skills required to the job except for a very basic know-how of Excel. However, it is pretty helpful to do a few finance courses as it just improves the understanding of what the team is doing and how it relates to the industry as a whole. Tool used (Development tools - H/w, S/w): Excel, Visual Basic for Applications, SQL Objectives of the project: To find and understand the breaks in trader commission account, caused by incorrect timing or amount of howledge regarding the international market and trading world from my	2018 19- sem <sup>2</sup>
GOLDMAN SACHS	Trader reviews- The work was to analyze and eliminate the operational risk involved with different trades by correctly capturing it in internal systems against the legal binding document. Tool used (Development tools - H/w, S/w): Alteryx, Tableau, MS-excel, Outlook Objectives of the project: Analysis and Elimination of Operational Risk Major Learning Outcomes: Alteryx, Tableau, Derivatives, Risk Analysis Brief Description of working environment, expectations from the company: Goldman Sachs has a very healthy working environment. Basic knowledge of MS-office comes handy. The students are properly trained according to the needs of the particular team and start to work on different products in parallel. Academic courses relevant to the project: Derivatives and Risk Management Name: M Mahitha (2015A8PS0431P)	2018 19- sem

Company	Experience	Year
GOLDMAN SACHS	The team I had to intern in was the probably one of the most finance inclined teams in operations. We had to review trades to ensure that there aren't any mistakes in them as it could cost the firm quite much. Tool used (Development tools - H/w, S/w): Firm specific software, knowledge in excel is beneficial Objectives of the project: To ensure that operational risk associated with the trades are minimised Major Learning Outcomes: Professional conduct, deeper knowledge of derivatives. Brief Description of working environment, expectations from the company: Very professional, there's room for an intern to learn a lot. Being mindful about things is what they expect from us. Academic courses relevant to the project: DRM is sufficient	2018- 19- sem1
Goldman Sachs - Investment Banking , Bangalore	Part of EMEA Financial Institutions Group, IBD; worked on live projects in European & GCC Banking, European Asset Management and European Insurance Sectors Tool used (Development tools - H/w, S/w): Internal tools; MS Excel, MS PowerPoint Objectives of the project: Understanding the rationale behind Mergers & Acquisitions, and qualitatively & quantitatively pitching to the client substantiating our strategy to go about the process Major Learning Outcomes: Overall understanding about the IBD space, key financial metrics used, impact of macroeconomic events on various deals and financial models used Details of Papers/patents: Brief Description of working environment, expectations from the company: High peerbased learning; got to work on live projects; no differentiation despite being an intern Academic courses relevant to the project: Business Analysis & Valuation; Fundamentals of Finance & Accounting; Financial Management; Security Analysis & Portfolio Management; Derivatives & Risk Management	2019- 20- sem1
Goldman Sachs - Investment Banking , Bangalore	Analyzing and preparing generic industry, market or specific company overviews; Researching and analyzing specific company financial information and fundamentals; Creation, maintenance, and analysis of basic and advanced financial modeling to build a valuation perspective; Assisting in forming the appropriate structuring of a deal; interact frequently with bankers in different regions. Tool used (Development tools - H/w, S/w): MS Office Objectives of the project: Buy Side advisory to choose appropriate target for the prospective client out of most selected peers Major Learning Outcomes: M&A Advisory, Financing (Equity and Bond issuance), Corporate Defence, Broking (ECM) Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Financial Management, Business Analysis and Valuation, Fundamentals of Finance and Accounting	2019- 20- sem1
Goldman Sachs - Investment Banking , Bangalore	Making Pitchbooks, client meeting materials, working on valuation material and anything related to an on going transaction. I was part of Industrials team and mostly dealt with Airlines and Packaging industry Tool used (Development tools - H/w, S/w): Excel, PowerPoint, Bloomberg, Thomson Reuters Objectives of the project: No specific project. You have to work on any ongoing transaction or client meeting your team is working on. Major Learning Outcomes: Learnt to work under immense pressure and tight deadlines while meeting quality standards. Have mastered the Excel and PowerPoint hacks. Was able to see how the theoretical financial concepts are applied in actual transactions. Details of Papers/patents: Brief Description of working environment, expectations from the company: Very flat heirarchy. Everyone is approachable and willing to help you. But the quantum of work is huge. Pulling off all nighters is a common on floor. It's a great learning opportunity - you are given ownership of the work and the distinction between an Intern and full time Analyst is very less. You'll almost be given similar responsibilities and perks. Good networking skills are extremely important for a long term future. Academic courses relevant to the project: BAV, FundaFin, TechRi Student	2019- 20- sem1
Goldman Sachs India Pvt. Ltd Operations , Bangalore	I interned in the securities division at goldman sachs. The primary role on desk was within equities asset class. It was a risk management function in equity derivative ops providing accuracy, timeliness, and integrity to securities underlying business, controlling the risk associated with the booking and legal documentation of structured derivative transactions by performing independent and thorough review. Tool used (Development tools - H/w, S/w): GS internal tools and calculators, MS-Excel Objectives of the project: Reduce the time for trade review process of equity linked notes Major Learning Outcomes: Function required extensive interaction with the traders, structuring and strategists/quants and also involves work with the other departments, including the documentation teams, middle offices, legal and product control. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work hours can get tough depending on trade volumes. Organization is more or less flat in terms of hierarchy. Academic courses relevant to the project: DRM, SAPM (not necessary but useful)	2019- 20- sem1

Company	Experience	Year
Goldman Sachs India Pvt. Ltd Operations , Bangalore	The work in the Exotic Trade Review mainly comprises of a detailed analysis of different equity-linked over-the-counter trades to manage the operational risk. The team ensures the consistency of internal booking systems with the legally binding documents before they are handed over to the clients. Tool used (Development tools - H/w, S/w): Objectives of the project: Eliminate the discrepancies between the document and the internal records so as to prevent unexpected mismatches during settlements.  Additionally, the documents sent out to the clients must reflect the agreed-upon intent of the trade correctly and compreh Major Learning Outcomes: Understanding of the characteristics of various derivatives, of exotic options & their valuation and of the outcomes, behaviour & payoffs of complicated trade structures. Details of Papers/patents: Brief Description of working environment, expectations from the company: You are given real responsibilities and offered good learning opportunities. The managers and teammates are professional and helpful. Academic courses relevant to the project: Derivatives and Risk Management	2019- 20- sem1
Goldman Sachs India Pvt. Ltd Operations , Bangalore	The first phase was to understand how my team chases the client daily and how to manually extract the required data that is to be sent to the client. I used VBA on which you can code and develop macros to automate the process. I developed a macro which does the complete work in just 4 clicks and thus requiring minimal manual effort. I also used Alteryx and automated quite a few processes Tool used (Development tools - H/w, S/w): VBA Excel Macros, Alteryx, SQL, Tableau Objectives of the project: AUTOMATION OF INTERNAL AND CLIENT E-MAILS Major Learning Outcomes: • I didn't have any background in coding. So, I learnt coding in VBA after coming to GS only. • Apart from this, I have been constantly learning about other Business Intelligence tools like Alteryx, SQL, and Tableau. • I acquired some of the most importan Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DRM, FINMAN, FINE	2019- 20- sem1
Goldman Sachs India Pvt. Ltd Operations , Bangalore	My work is processing the Structured Products which is a combination of Bonds and derivatives with varied underlie-rs. The work is deadline based as these are securities Issued into the Market. As a part of project it is expected to bring in changes in workflows and undertake automation tasks. Goldman also has a Data School program where they teach Business Intelligence software to empower the employees to undertake automation tasks. Tool used (Development tools - H/w, S/w): Microsoft Excel, Sql, Alteryx and some Goldman internal softwares Objectives of the project: Automation Major Learning Outcomes: Chance to learn Excel VBA, Sql, Alteryx, Tableau Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Finance Minor Student	2019- 20- sem1
Goodera (NextGen PMS Pvt. Ltd)- Non IT , Bangalore	As part of Product Team. I worked with different teams and helped in development of their new product which reduced their Dashboard building time by 80%. Tool used (Development tools - H/w, S/w):  Postman, JavaScript, HTML, CSS, MongoDB Objectives of the project: New Product Development and Building Demo Products. Major Learning Outcomes: Organizational Structure, Product Development Cycle, Knowledge about tools and frameworks used is Web Application Development. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOP	2019- 20- sem1
Goodera (NextGen PMS Pvt. Ltd)- Non IT , Bangalore	Work was divided into two projects: Data Outlier Detection to detect outliers in the client data and creating a common framework which would enable all the developers to create and upload excel files effectively and much more quickly Tool used (Development tools - H/w, S/w):  Python,Pandas,Numpy,Angular Js, Node Js Objectives of the project: Creating a data outlier detection tool and creating a common framework to download and upload excel files Major Learning Outcomes:  Version Control Systems, Rest API's, Working with large data Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is non taxing and learning is encouraged and ample time is alloted Academic courses relevant to the project: Neural Networks and Fuzzy Logic, Machine Learning Brief write-up on PS-II station: Students should have interest in Environmental Pollution control and contribute to Zero Discharge Plant initiative. The students should evince interest in data collection and analysis, interact with the employees of the organization professionally and follow industry code of conduct. The industries want that the students should come up with suggestions and recommendations based on data collection and analysis so that the organization benefits and students also have good learning during the period. Student	2019- 20- sem1

Company	Experience	Year
Goodera, Gurgaon	I work as a product management intern in the volunteer section of the Goodera. I handled the finance part of donations, helped in product testing, created analytics dashboard for volunteering events and miscellaneous other assignments. My work also included preparing ppts about the product, this included features, roles in the product, workflow of various processes, etc. Product managers and sales team to pitch clients in India and abroad used these. I had a chance to collaborate and work with various teams including developers, designers, marketing, sales, consultants, sourcing, etc. As a product intern this was a part and parcel of my wok. Tool used (Development tools - H/w, S/w): SQL, excel, metabase, company specific software. Objectives of the project: product testing, Donations management, etc Major Learning Outcomes: multi tasking, SQL, basics of python, corporate communication, etc. Brief Description of working environment, expectations from the company: Our section is at a stage where the growth is rapid and the scope is immense in and outside India. It was a great opportunity to work in a section which was at the early stage of development. The people were really great and offered me support whenever needed. Name: Kriti Khandelwal (2014B1A10510P)	2018- 19- sem1
Goodera, Gurgaon	The work involved managing and evaluating strategies to carry out CSR initiatives by the corporate clients. For doing so, I had to interact with partner NGOs, collect data, analyse it and then produce it in a manner desired by the client on the dashboard. I had to manage accounts and data for client-centric projects. The company carries out various exercises like Impact Assessment studies in which I had to provide my assistance. I also carried out designing for dashboards and provide logic for the same, hence, acting as a link between the technical team and the clients. Tool used (Development tools - H/w, S/w): MS Excel, MS Word, MS Powerpoint Objectives of the project: Key Account Management for Corporate clients Major Learning Outcomes: I have gained in-depth knowledge about different kinds of sectors and associated strengths and gaps. I have realized the importance of presenting data in an appropriate manner, efficient time management, proper documentation and presentation delivery to the corporates. One important skill that I have learnt is "Less is More". Brief Description of working environment, expectations from the company: The work environment is quite friendly. The team is well bonded with a mix of experienced and young members. The company does not follow a hierarchy system and has a peer system which enabled us to work directly under the senior members and also interact with clients. Academic courses relevant to the project: Human resource development, Current Affairs Name: Atish Kumar Sinha (2014B2A30958G)	2018- 19- sem1
Goodera, Gurgaon	I was basically involved with development of dashboards for various clients for and their various CSR projects. Tool used (Development tools - H/w, S/w): HTML,CSS,JAVASCRIPT, NODE, REACT Objectives of the project: To learn Web development and build dashboards Major Learning Outcomes: Getting in depth knowledge of HTML, CSS and JavaScript, Learning about MongoDB and how to write its queries. Brief Description of working environment, expectations from the company: The working environment is pretty good. There is some times a lot of pressure (generally when you are near to the deadlines and have few deliverable at your end which are not finished. (This may be due to the work being overloaded)). Apart from this everything is pretty good. Name: AMAN KUMAR GOSWAMI (2015A8PS0473G)	2018- 19- sem1
Goodera, Gurgaon	Work will be mostly related to building digital dashboards, both back-end and front-end. Apart from that I was also assigned API Integration for which I had to write few Python scripts. In this PS station, you will be expected to deliver work on time. They will treat you as full time employees and not interns. Each day a minimum of 9 hours of work is compulsory. Tool used (Development tools - H/w, S/w): HTML, CSS, JavaScript, React, MongoDB, Python Objectives of the project: Building of Digital Dashboards and API Integration Major Learning Outcomes: Got a good grasp of HTML, CSS, JavaScript, React, MongoDB, Python etc. Brief Description of working environment, expectations from the company: The working environment of the company is good, if not great. Sometimes it gets extremely hectic and the work pressure will be tremendous. Name: Sanskriti Shrivastava (2015A3PS0184G)	2018- 19- sem1
Goodera, Gurgaon	basic work is to develop dashboards using web developmentfrontend and backend(if given). The work will be repetitive .Don't come under the influence of work description in provided by compnay. work is pure web d. Tool used (Development tools - H/w, S/w): HTML, CSS, js, react Objectives of the project: develop dashboards for various clients. For e.g. make a card to show how many women got employed in an NGO in a year/month/quarter/school/village/block etc. Major Learning Outcomes: web development and mongo DB query writing skills. Brief Description of working environment, expectations from the company: company expects work of 9 hours from every intern and timely delivery of tasks. Name: Shubham Tripathi (2015A2PS0711P)	2018- 19- sem1

Company	Experience	Year
Goodera, Gurgaon	The project work involved understanding of Memorandum of Understanding signed between the two clients, Creation of LFA, Design of intelligent dashboards, Creation of Linking Sheets for the said dashboards to make them dynamic, Analysis of data uploaded, and Project Progress Report preparation for effective communication with the client. Tool used (Development tools - H/w, S/w): Goodera Enterprise, MS Office Objectives of the project: Key Account Management in CSR Consulting Major Learning Outcomes: Development of professional communication skills, Knowledge about Company's Act, Fluency in using MS Office, Basic analytical Skills, Key Account Management. Brief Description of working environment, expectations from the company: The working environment in the organisation is awesome. People here are very helpful and supportive. Relevant discussions regarding work are always round the corner and the best part is you won't be feeling left out at any point of time. Academic courses relevant to the project: Principle of Economics, Technical Report Writing	2018- 19- sem1
Grasim Industries Ltd. , Nagda	In this project we concentrated on the ETP (Effluent Treatment plant) and its working. We also studied the new equipment that has been introduced in the department. We also found out the functioning of all the machinery in the ETP. We also found out how pH of the Inlet water changes with the acidity of the acid used and how it should be neutralized. We also studied the removal of the Zinc material from the Inlet water. We also studied the waste percents and why the waste in question is at a higher rate compared to others. We also studied how the cleaning procedures of jets and candles can be improved with greater efficiency. Tool used (Development tools - H/w, S/w): Microsoft Excel, MATLAB Objectives of the project: Methods to reduce ETP Load due to Spinning Major Learning Outcomes: How pH varies with Acidity & other factors, pH level for the removal of zinc from waste water Details of Papers/patents: Brief Description of working environment, expectations from the company: Working with the shift engineering was really good. They were very cooperative in helping me during the PS2. Academic courses relevant to the project: 1. Introduction to Fluid Mechanics 2. Unit Operations of Chemical Engineering 3. Chemical Engineering Thermodynamics.	2019- 20- sem1
Grasim Industries Ltd. , Nagda	Detailed analysis of the efficiency of scrubber system with new design equipment, efficiency analysis of the condenser system with fins, derived a function of parameters for maintaining optimum recovery of CS2. Tool used (Development tools - H/w, S/w): Aspen, Excel Objectives of the project: To increase the CS2 recovery percentage from spinning department, using data analysis, new design. Major Learning Outcomes: Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Chemical process technology, Heat transfer. Student	2019- 20- sem1
Grasim Industries Ltd. (Nagda)	We (team of 2 members) were alloted 'viscose' department in the industry. After gaining knowledge on the working of the processes involved in the viscose department, we carried material balance around a system to evaluate certain parameters. Our project also included energy balance across two systems and TR load calculation. Our major projects were to design a Heat Exchanger across a system to achieve desirable temperature (design project), to recommend methods to reduce variations in make-up of AlkCell mat (research project). During the course, we were given side projects as well including calculation of pneumatic line size for transportation of fluid, flash calculation etc. Tool used (Development tools - H/w, S/w): Microsoft Excel spreadsheet Objectives of the project: -To design a heat exchanger around a system, considering the various existing restrictions To recommend methods to reduce variations in the make-up of AlkCell Mat Major Learning Outcomes: Scale-up operations and designing of process equipment Brief Description of working environment, expectations from the company: Your experience at Grasim Industries Ltd., Nagda depends on the level of enthusiasm shown by you. The mentors allotted to students here are professional and highly skilled and they are more than willing to share their knowledge with students, given they show interest and engage in healthy discussions with them. Do let them know the type of project you want to do and they will allot you projects accordingly. Academic courses relevant to the project: Heat Transfer, CPC, Fluid Dynamics, PDP-II Name: Rudra Singh Rathore (2015A1PS0562G)	2018- 19- sem1
Grasim Industries Ltd. (Nagda)	We designed a Plate heat exchanger which can replace the currently installed shell and tube heat exchanger to achieve a lower lye temperature of 40 degrees Celsius at which higher swelling and dissolution of the pulp used in the process takes place to get a higher quality of viscose fibre. We also did a project to analyze the process at twin roll press and provided recommendations to reduce the variations in the % alkalinity and % cellulose content of the Alkali-Cellulose mat formed at twin roll press. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: Enhancing the process efficiency in Viscose department Major Learning Outcomes: Working experience on industrial scale and practical applications of chemical engineering Academic courses relevant to the project: Heat Transfer, Thermodynamics, Fluid mechanics, Process design principles Name: Ravi Teja V S (2015A1PS0544H)	2018- 19- sem1

Company	Experience	Year
Grasim Industries Ltd. (Nagda)	Controller performance analysis and monitoring Tool used (Development tools - H/w, S/w): Matlab and Simulink Objectives of the project: To have a first hand report on a controller with all the vital information for fault detection Major Learning Outcomes: Real industrial application exposure along with improvement in the skills of MATLAB and Simulink Academic courses relevant to the project: Process Design and Control, Modelling and Simulation Name: L SAI SUHAS REDDY (2014B5A10878P) Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Increase the salt whiteness Major Learning Outcomes: Sodium sulphate production and market cost and usage Academic courses relevant to the project: Thermodynamics, heat transfer Name: Yadul Sethi (2015A1PS0522P)	2018- 19- sem1
Grasim Industries Ltd. (Nagda)	1.) Fault detection in Control valve using statistical tools and index like spectral analysis, non-linearity test, saturation index etc. 2.) Modelling of Pulping Process using physical and empirical methods. Tool used (Development tools - H/w, S/w): MATLAB, Python, Advanced Excel Objectives of the project: Application of data analytics tools in chemical engineering Major Learning Outcomes: Application of data analytics tools in chemical engineering. Brief Description of working environment, expectations from the company: Don't expect any other thing apart from the work. Academic courses relevant to the project: Modelling and simulation, Process dynamics and control Name: Nagendra Babu (2014A1PS0830G) Objectives of the project: Enhance the efficiency of the spinning department Major Learning Outcomes: An experience of the industrial exposure. Academic courses relevant to the project: Process Engineering	2018- 19- sem1
Groww	I worked on lot of projects. I designed referral program with the incentive system and nudges. I was working under the CXO's directly on many projects. I learnt about product thinking, building fast and how you ship products in scrum framework. Initially, I learnt basics of data analytics and using MySQL, ProgreSQL, GA, Excel, Firebase and some other third party services. I was also handling a new product while beta testing along with CEO for around 3 months. This involved crunching and understanding a lot of data and making sense out of it. I was collaborating with design team, developers, content and data team. Tool used (Development tools - H/w, S/w): MySQL, ProgreSQL, Google Analytics, Excel, Firebase, Webengage, Metabase Objectives of the project: Many objectives as specified already Major Learning Outcomes: All in all, it was great learning experience for me with everyday learning something new about how to make great products and obsessing over the customer. Learnt about product management and product lifecycles. How to collaborate in small teams and ship products faster. I was given ample of ownership on some upcoming projects and since the team is very experienced, it was an amazing way to spend six months. Brief Description of working environment, expectations from the company: The company is great to work in every sense of working. There are literally no rules and regulations and you've complete freedom of putting across your ideas. Everyone is very friendly and they have few BITSians too. We have roughly 2 outings during my time here and it was fun (as you would expect in a startup). Bangalore	2018- 19- sem1
Groww - Software Development , Bangalore	It was mainly Backend Development for web and app. A whole new learning platform to learn about investment world was developed by us. Backend development was done in Springboot MVC framework. Tool used (Development tools - H/w, S/w): Java, Spring MVC framework, Maven, Git Objectives of the project: To make the investing platform more secure and easy to onboard for the new user. A new learning platform for the users who are new to this. Major Learning Outcomes: Backend Development usingSpring MVC framework, working in a team and sticking to deadlines. Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is quite cool and fun. Employees are very helpful. You'll get to learn a lot while working in a team. We worked directly under the CTO of the company. If you have some suggestions, they value it and if it is better than the other ones, then implement it. You are given tasks that are important and sometimes critical too, so you're expected to stick to the deadlines sometimes very strictly. If you did something, you own that and any further improvements are in your own interest. In short, it's way great if you want to learn new things and how to work in a company. Academic courses relevant to the project: OOP, DSA, Computer Networks Student	2019- 20- sem1
HAPPAY (VA Tech Ventures Pvt Ltd.) , Bangalore	Work was mostly related to software development (Back-end). They asked us to build web applications which were directly used by the company. The working cycle consisted of daily status evaluation after the 15 day target was allocated. Development was in Python and Django. I've made Gmail Parser and Invoice Center application along with GST service application. Tool used (Development tools - H/w, S/w): Python and Django(API design), Postman, Docker Objectives of the project: Gmail Parser and Invoice Center Web Application Major Learning Outcomes: Learning involves use of Object Oriented Programming concepts in Python and use of Django framework. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment was very encouraging. There are seniors willing to help always. There's not much of diversity in the work, it's mostly Back-end APIs related only. Academic courses relevant to the project: OOP	2019- 20- sem1

Company	Experience	Year
HAPPAY (VA Tech Ventures Pvt Ltd.) , Bangalore	I was part of product management team at Happay during my PS2. I was responsible for defining product requirements, planning the product roadmap, enhancement of existing product features and brainstorming on new product possibilities. I interacted with the Engineering/ Product teams to develop viable and innovative solutions for product related issues. Staying abreast of the competitive landscape and to solicit customer feedback on existing product capabilities were some of my key functions in this role. Tool used (Development tools - H/w, S/w): Balsamiq Mockups, Lucidchart, Mircrosoft excel, Mircrosoft word, Mircrosoft powerpoint Objectives of the project: Vendor Product Enhancement Major Learning Outcomes: Product Management Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Principle of management, Principle of Economics, C programming Brief write-up on PS-II station: Essential prerequisite courses required before working on the project Proficiency in Python, Elasticsearch, Kibana, PostgreSQL, and Advanced Excel, is required, Machine learning, basics of artificial intelligence, Python Python, AWS,Webex Api, Java, Scala, Elasticsearch, Logstash, Kibana, Spring Boot, HTML, CSS, JavaScript DSA, OOP, Neural network and fuzzy logics, Computer Programming, Symbolic Logic, Digital Signal Processing Python Programming, Computer Graphics, Basics of JavaScript, Machine Learning, Cloud Computing, NNFL, DSA, Al Student	2019- 20- sem1
HAPPAY (VA Tech Ventures Pvt. Ltd.),	The project consisted of 2 parts, the first at building an Invoice Parser to extract important attributes like GST, Total Amount, Date, Merchant etc. from an Invoice and classify the bills into segments to improve the company's existing Al-powered Enterprise Edition. The second part of the project is to build a dashboard, integrate the frontend and backend, and verify the parsed data and make necessary changes. Tool used (Development tools - H/w, S/w): Google Cloud Vision, Django, Python, IBM's Watson Studio, Docker, Git, Postgres Objectives of the project: Build a Micro-Service (Invoice Parser) to extract various attributes like GST, Amount, Merchant etc. for clients to fast-track their expense creation. Major Learning Outcomes: Brainstormed on product designs, implemented the project from scratch, wrote the parser, and created the backend support of a CMS to verify and make necessary changes to the parsed data. Worked on RESTful APIs, Django, Docker, Git and Postgres. Brief Description of working environment, expectations from the company: Happay as a workplace is really good. Projects will be assigned after a month of training and segregation into groups. They have their own web app Happay Expense Management App for Companies. Like Sap, ERP systems type, so students will be directly working on the app. There are various components in the app like Accounting (Pandas related), Travel (just like MakeMyTrip) etc, so in general it is backend work, writing API's, improving existing features or, coming up with new features and so on. Students can work on multiple roles side by side like backend + frontend, or product management. Their codebase is on Django + Postgres. Almost everything that students learn in software development is here (Servers, celery etc). There are enough options to work from home and take leaves. Office time is 10:30 to 6:30. Academic courses relevant to the project: Machine Learning (A mini project can be assigned on OCR)	2018- 19- sem1
HCL Technologies Ltd., Pune	I worked on a software called CAMWorks with the team which has been involved in its development for quite some time. CAMWorks is a powerful tool which acts as plugin to SolidWorks and has incredible importance in Manufactoring Industry. I worked on it under my mentor who decided which partivular issues should be allotted to me in ascending order of difficulty as the bar for entrance into this particular field is set quite high. This is due to high number of dependencies and libraries involved in the process of development and knowledge of the software itself and what it does is not something a CS student would be aware of. Tool used (Development tools - H/w, S/w): Microsoft Visual Studio, Jira, Tortoise SVN Objectives of the project: To Make Manufacturing process easier Major Learning Outcomes: Learned software development and teamwork Brief Description of working environment, expectations from the company: Working environment is great and colleagues were incredibly helpful and supportive. Academic courses relevant to the project: OOP, OS, DSA	2018- 19- sem1
HCL Technologies, Bangalore:	The assignments given required the knowledge of HTML5,CSS3, Javascript, React JS, Jest and Canvas. The final project was to be done using React JS. But I had to learn HTML5, CSS3, JavaScript and Canvas before starting React JS. Assignments were given regularly based on these topics to help me in better understanding of the topics. The common components were delivered using React JS. Tool used (Development tools - H/w, S/w): HTML,CSS,JavaScript,React JS Objectives of the project: To deliver user interface common components using React JS Major Learning Outcomes: User Interface web development Brief Description of working environment, expectations from the company: The working environment depends totally on the team. I was fortunate to be in a team that supported and guided me well throughout the internship. They were very patient during the learning process and always very helpful. Center, Chennai	2018- 19- sem1

Company	Experience	Year
HCL Technologies, Chennai	Designed a transmitter based on ARINC-818 protocol used to transfer raw video data. Tools used (Development tools - H/w, S/w): Verilog/VHDL, Cadence Innovus. Objectives of the project: To complete an architectural level design of an ARINC 818 transmitter. Outcomes of the project: Architectural level design of ARINC 818 transmitter. Major Learning Outcomes: HDL, nuances of circuit design. Brief Description of working environment, expectations from the company: Helpful colleagues and mentors. Decent work load.	2016- 17- sem1
HCL Technologies, Chennai	1. Training in physical design 2. Designing an ARINC-818 compliant transmitter. Documentation of the rules of the protocol and the high level architecture. Tools used (Development tools - H/w, S/w): Tanner EDA Objectives of the project: To Design an ARINC-818 transmitter Outcomes of the project: Designed the high level architecture of an ARINC-818 transmitter and documented it. Major Learning Outcomes: 1. Design flow 2. Design concepts 3. ARIINC-818 protocol Brief Description of working environment, expectations from the company: Assigned a reporting manager and a reporting team. We had 2-3 meetings a week. Rest of the time we were left on our own to do the work.	2016- 17- sem1
HCL Technologies, Chennai	First 3 months were spent on training in VLSI physical design - Logic synthesis, placement, power planning, routing, and verification and GDSII steps. Also got trained in UNIX and Perl scripting. Then I was assigned to a project for which I made a design for a transmitter circuit for video transmission in an aircraft, using the ARINC-818 protocol. Studied the protocol specifications manual and about the necessary logic components and designed a circuit under the guidance of the company team leads. Tools used (Development tools - H/w, S/w): Strawberry Perl, Cygwin, Electric tool, Mentor Graphics tools for layout and schematic design, ARINC-818 timing calculator from Great River Tech Objectives of the project: To design a transmitter for continuous transmission of uncompressed video data in an aircraft using the ARINC-818 protocol.  Outcomes of the project: Submitted a complete feasible logic design for the same. Major Learning Outcomes: Learnt a lot about VLSI physical design steps and fabrication. Learnt about different protocols used for media transmission and also to design using them. Learnt UNIX and Perl scripting with real time coding. Also learnt about the flow of project work in a corporate company. Brief Description of working environment, expectations from the company: The working environment was really sublime. All the employees treated us well and were really keen to help us in our work. The team lead engineers were always there to help us in times of need. Our manager also helped us a lot in getting us settled in the company as well as in Chennai. There was some delay in getting us assigned to a project, so we had to rush to complete the work. But overall, the experience was really good.	2016- 17- sem1
HCL Technologies, Chennai	The aim of the project was to find ways to minimize/eliminate the expertise required in LabVIEW development in the field of Instrument Control, Data Acquisition. This concern is due to the Graphical Programming Nature of LabVIEW. It was achieved using the VI scripting facilities in LabVIEW. Also, other alternatives and a console based approach to Data Acquisition through LabWindows were researched upon. Tools used (Development tools - H/w, S/w): LabVIEW, LabWindows/CVI, Python, and DAQ Objectives of the project: To find ways to minimize/eliminate the expertise required in LabVIEW development in the field of Instrument Control, Data Acquisition. Outcomes of the project: Alternatives to LabVIEW and their feasibility were researched upon, along with creating small PoC's for them. Major Learning Outcomes: A lot of time to explore different kinds of technologies, insight into what the R&D team is currently working on. Brief Description of working environment, expectations from the company: Work environment is very flexible and the transition into the corporate world was a breeze. It will be helpful if the students have prior knowledge or even a basic idea about the software and hardware used for instrumentation, especially NI modules.	2016- 17- sem1

Company	Experience	Year
HCL Technologies, Chennai	Research work to find ways to eliminate/minimize LabVIEW development in Data Acquisition through other external textual programming languages. Tools used (Development tools - H/w, S/w): LabVIEW, Labwindows, Python, and ActiveX Objectives of the project: The aim of the project is to find ways to minimize/eliminate the expertise required in LabVIEW development in the field of Instrument Control, Data Acquisition. This concern is due to the Graphical Programming Nature of LabVIEW, which is not native to most of the programmers, who are basically habituated to textual programming. The objective is endeavored to be achieved using the VI scripting facilities in LabVIEW. Also, other alternatives and a console based approach to Data Acquisition through Labwindows are researched upon. Outcomes of the project: We found that the elimination of LabVIEW development is impossible. There is always a point where one has to build the Virtual Instruments(VI) in LabVIEW and one can only communicate with VI's from external by passing input and receiving output parameter values from the front panel of VI.We found similar software of NI i.e. which purely supports the C language and is used for Data Acquisition, Instrument Control as well. Major Learning Outcomes: VI scripting, LabVIEW application building, Labwindows Details of papers/patents:White papers on National Instruments website about LabVIEW, VI scripting, Labwindows Brief Description of working environment, expectations from the company: Working environment was great with sportive and encouraging people around and flexible office timings. Sometimes the company wasn't able to provide some resources because of unavailability and that time went unproductive.	2016- 17- sem1
HCL Technologies, Chennai	We worked on the architecture of ADVB protocol transmitter. Objectives of the project: To develop the architecture of ADVB transmitter. Outcomes of the project: We developed the architecture of ADVB protocol transmitter Major Learning Outcomes: Learnt about the work culture in the corporate world. I learnt about the physical design of VLSI chip and various blocks of ADVB transmitter architecture. Brief Description of working environment, expectations from the company: The working environment was good and our team leads and mentors were amiable. We were expected to work on the architecture of ADVB transmitter. Our team leads have always been there to help us work on the projects. Mentor Designation: Group Technical Manager The project dealt with research in the domain of using PMML for Big data analytic using parallel algorithms. The BITS interns did a commendable job. Student	2016- 17- sem1
HCL Technologies, Noida	PMML Development was the name of my Project. It was a research based project. Initially I was working on data processing, in short - transformation from unstructured data into structure data, processing of the structured data and finally analyzing the processed output. Thereafter few concepts of Machine learning were required to understand the papers related with project. At last I was given a few questions. They were related to compiler construction and issues involved while deploying a software on a system. Over all this entire project required little coding but theoretically most of the concepts we had learnt in college. Tools used (Development tools - H/w, S/w): Eclipse only Objectives of the project: To understand the usage of PMML- Predictive model markup language and problems faced while developing one of your own Outcomes of the project: PMML itself Major Learning Outcomes: Difficulties faced while deploying the software. Brief Description of working environment, expectations from the company: On the first day itself they provided a desktop. Some members of the team were familiar with project while others were newbies like me. Initially older members helped a lot and addressed every question patiently while later everyone became result oriented and work pressure increased exponentially. Overall it was a healthy working environment and the only thing they expected from me was that I should learn at the end of the Day.	2016- 17- sem1

Company Experience Year

In HCL, our managers were interested in making in their own version of a software known as Zementis, which is available commercially. This software basically deploys predictive models. Predictive models are used for advanced analytics which is used to make predictions about unknown future events. This type of modeling uses many techniques from data mining, statistics, modeling, machine learning, and artificial intelligence to analyze current data to make predictions about future. Different people write models in different languages, so if a new member starts working on a same model, it would take him time to understand that model. Also during deployment, model should be written in python or R, and generally model is written in Java. So to overcome this problem a standard language is used which is termed as PMML (Predictive Model Markup Language). This language follows XML syntax. To deploy the models written in this language there are multiple platforms which include an open source software JPMML evaluator and a proprietary software Zementis. The advantage of Zementis is that it is very fast, which provides its users an edge in today's competitive market. So using JPMML evaluator as an example, we tried to give suggestions using which the company could develop their own software. Our suggestions were well received and appreciated. Tools used (Development tools - H/w, S/w): JPMML evaluator was the major software used as most of the suggestions were given as to how to improve it to suit the requirements of the companies. Eclipse (JDE) was used a platform to deploy JPMML evaluator on. Objectives of the project: Our objectives were: [] To explain the need for PMML. [] To determine how a High Level Language could be transformed to another High Level Language. [] To distribute data in such a way as to achieve parallel computing of data. Outcomes of the project: We suggested some approaches to develop their own software. We explained the need for PMML, a way to convert any High Level Language to another High Level Language and a way to distribute the data. Major Learning Outcomes: I learnt about software development and the importance of teamwork. I also got to know a lot about machine learning, data mining, big data, statistics, predictive analytics and much more. Brief Description of working environment, expectations from the company: The best thing I liked in this company was that we were not spoon-fed. We were told what was expected of us, but whenever we required help, it was provided to us by our manager and other employees, working alongside us. The working environment was very good. We were given flexible timings so that we could work when we felt most productive. Our manager was a very knowledgeable person and helped us whenever we required it. He also taught us about work ethics and team work. I learnt a lot about the corporate culture. Being a part of a Multinational company of this size, we got to meet with different types of personalities and learnt a lot from them. The HR division was also very active and used to conduct different type of events for their employees. The events ranged from cultural to social. During my time there, they conducted a free full body check-up for HCL employees and

HCL Technologies, Noida

2016-17sem1

Healthcare Technology

Student

I have learned how to design a User Interface using Qt Creator, a software used to build User Interfaces. I have also learned about DICOM and how to implement it across different devices. Another thing I have learned is how to use GitHub and Bitbucket as a means to share and develop code. Lastly, I have learned about the Software Development Life Cycle (SDLC), and have observed and participated in carrying out each step of the process in real time. The User Interface I have designed is now being used for demonstrations to clients who have given requirements for the Bronchoscope. DICOM is being used to share medical information between equipment. My roles in the SDLC have also contributed to the final stages of testing and debugging the system software of the bronchoscope. Tool used (Development tools -H/w, S/w): Bronchoscope, Qt Creator, Linux, DICOM Viewer, DICOM library Objectives of the project: The main aim is to develop parts of the system software of the Bronchoscope. The objectives of this project include: 1. Implementing DICOM in the Bronchoscope and a connected PC for file and data sharing 2. Designing the User Interface using Qt Creator 3. Integration of interface and physical components 4. Testing and fixing bugs in the scope's software Major Learning Outcomes: DICOM, UI Design using Qt Creator, Bitbucket, GitHub, SDLC Brief Description of working environment, expectations from the company: HTIC has a transparent and open environment, where everyone's opinion is considered. It is also training and development focused, as HTIC really cares about training interns, and deploys the proper personnel for the task. They are considerate and try to give holistic exposure to the different sectors of work being done. There is strong team spirit in the workplace, as most, if not all projects are done by large teams. People are always willing to lend a helping hand. Academic courses relevant to the project: EEE F348 FPGA Based System Design Laboratory EEE F435 Digital Image Processing Name: GSKP Srikar

from time to time information brochures about seasonal diseases and their prevention, lifestyle diseases, were sent. Overall it was a smooth transition from academic environment to corporate environment enabled by the combined efforts of our manager, colleagues and HR division of HCL Technologies. Chennai

2018-19-

sem1

Company	Experience	Year
Healthcare Technology Innovation	Image Segmentation Tool used (Development tools - H/w, S/w): Python, Matlab, Ilastik, Tensorflow, numpy, pandas Objectives of the project: Image Segmentation Major Learning Outcomes: Deep Learning, Python Programming, Machine Learning Brief Description of working environment, expectations from the company: Timings: 10AM-7PM   Timings depends on the team you are working in. Work is result oriented. Stress free since many IIT students are there. Since, the accommodation is provided in IIT Madras Campus itself, you can work late-night along with few Project Associates/MSc students.Hence, timings are flexible (depends on team). Expectations from Company: Take-up initiatives. Be good at programming (Python in my team). Strong basics in the subject. Be PRESENT. Don't expect to be spoon fed. Pros to PS Student: 1. If shown good performance in PS, you a get a chance to continue here after B.E. and do an MSc in IIT Madras with Prof recommendation (The company is headed by an IIT Madras Professor. 2. Since research work is going on in HTIC, you might get to publish a paper if lucky. Cons: 1. Accom @ IIT Madras Hostel: DO NOT expect to be as good as BITS hostel. You need to pay for IIT hostel. HTIC just gives permission to stay in IIT) 2. Very poor stipend(10k). Contact me for more details Academic courses relevant to the project: Artificial Intelligence, Machine Learning	2018- 19- sem1
Healthcare Technology Innovation Centre (HTIC),	Basic project on height, weight and respiratory rate measurement devices. Interfacing three different sensors namely, Ultrasonic sensor, load cell and Accelerometer with a microcontroller nrf51(BMD 200) and transferring to anroid tab using bluetooth low energy. Tools used (Development tools - H/w, S/w): IAR workbench, Keil, nrf gostudio, nrf51, accelerometer mma485, hcsr04 Objectives of the project: Make wearable respiratory rate device and kiosk of height and weight measurement device Outcomes of the project: Three independent devices made Major Learning Outcomes: Embedded systems -both hardware and software Brief Description of working environment, expectations from the company: They expect decent amount of effort, very hard to get a PPO and unorganized environment. They don't have time for their juniors or interns. Not so good experience but tried on my own to learn a lot. Very basic level of work done. No importance given to deadlines.	2016- 17- sem1
Healthcare Technology Innovation Centre (HTIC),	I've been working on a project to develop a feature matrix to find features for developing a tool to help in the field of Arthroplasty. Tools used (Development tools - H/w, S/w): ViewSTL, 3DViewerOnline, ScanIP (Simpleware), Materialize Mimics, Autodesk A360 Viewer, and so on various other DICOM viewers were used. Objectives of the project: To look for similar tools available in the market and collect information about their features, benefits, and drawbacks. Put the information about their features in a feature matrix to ease the process of comparison. Outcomes of the project: The various tools and their respective features were collected and put together to form a feature matrix, which makes the job of other members of the project group to know what's the basic features and what is the latest update on features that need due importance in the making of their own tool and as per the project needs. Major Learning Outcomes: Learnt about various topics like STL, STereoLithography, Arthroplasty, STL files, DICOM, DICOM viewer, DICOM editors and how to review and research on building a feature matrix. Brief Description of working environment, expectations from the company: Healthcare Technology Innovation Centre (HTIC) is a multidisciplinary R&D Centre, a joint initiative of Indian Institute of Technology Madras (IITM) and Department of Biotechnology (DBT), Government of India that brings together technologists, engineers, doctors and healthcare professionals, industry and government to develop healthcare technologies for the country. It is a good place to learn about the latest technologies, and get hands on experience in various R&D fields.	2016- 17- sem1

Company Experience Year

There is a vital need for portable and cost-effective point-ofcare (POC) testing technologies providing reliable and rapid results. Lateral Flow Immunoassays (LFIA) are suitable POCT diagnostic tools with potential for use in a wide variety of point-of-care or field applications ranging from uses in clinical diagnostics to aiding law enforcement. There is a need for quantitative instrument readers to provide precise results to support decision making using the POC technologies. This report explores the use of point and shoot digital camera and mobile phone camera for fluorescence imaging of the immunoassay. Commercially available models which satisfy the working conditions imposed on the fluorescence imaging system are identified. A suitable Canon point and shoot digital camera was identified for the application but was rejected in favour of a mobile phone camera due to the availability of an integrated platform for application development. The system performance of the mobile based LFIA quantitative reader is reported through tests conducted for Glycated Haemoglobin (HbA1c) in blood samples. Tools used (Development tools - H/w, S/w): LabVIEW, MATLAB Objectives of the project: The aim of the project is to develop a rapid quantitative lateral flow immunoassay reader. The objectives were to explore the usage of point & shoot digital cameras and mobile phone camera for fluorescence imaging system and identify suitable models available in the market. After identification, characterize the system performance of the imaging systems explored using reference and blood test assays. Outcomes of the project: A mobile based fluorescence LFIA quantitative reader was developed and the system performance was characterized using Glycated Haemoglobin (HbA1c) blood samples. Major Learning Outcomes: I have learned to use LabVIEW and MATLAB for image analysis and have learned the rigorous process of characterizing diagnostic instruments. Brief Description of working environment, expectations from the company: I was working in a

research team collaborating with the industry on a product. As such I was exposed to both the research and development side and the marketing side of the product. Working at HTIC enables to work on multidisciplinary projects ranging from mechanical to biology and electrical and electronics. The company has relatively small number of employees and is very active with lot of ongoing research. You will get to

interact with the other projects sometimes even by providing them data, such as for heart rate

measurement designed by the wearable team.

sincerity and discipline from students. Student

2016-17sem1

Healthcare Technology Innovation Centre (HTIC),

My project aims to create an e-dietitian software to help and enhance dieticians in determining and planning specific diets for patients as well as otherwise healthy personnel. The software aims to create a data repository of nutrients and diets, so that a practicing dietician shall be able to develop and schedule a dietary plan as per the circumstantial requirements of each individual. This web-based application is developed using Drupal, an open source content management system. Drupal has some great standard features like easy content authoring, reliable performance and good security. With the help of this software a dietician can store the details of the patient. Using the patient's body requirements, medical history, feeding method and food preferences, a diet is generated accordingly. Tools used (Development tools - H/w, S/w): Drupal, php Objectives of the project: To develop an e-dietitian software Outcomes of the project: A web application Major Learning Outcomes: Drupal Brief Description of working environment, expectations from the company: Work environment at HTIC is very encouraging. Mentors are very resourceful and willing to help. Mentor Designation: Manager, Engineering Students are picking up skills very fast. Mentors are very happy from the interns. Students performed the assigned tasks very comprehensively. Mentors are very happy with the practice school program. Students get time to learn so many things, and to engage in a professional work environment. It's a very good initiative, students get time to groom in the organizational environment. Faculty Comments: Expectations from industry: Software Tools Used: Hadoop, Maven, Github, Eclipse, Putty, Locus, JSON, Postman Soft Skills: Ability to work in team environment, attention to details, adherence to timelines, good communication skills,

promptness and timeliness Students can prepare better by building basic concepts in topics such as Data Mining, Android Programming, DBMS (SQL Query Designing), Java Programming Industry expect PS2 interns to have a learning attitude, and willingness to work hard. While industry people understand that students will not know everything beforehand, but expect students to learn quickly. Industry also expects

2016-17sem1

Healthcare Technology Innovation Centre (HTIC),

Company	Experience	Year
HealthCubed India Pvt. Ltd., Bangalore	HealthCube is an integrated, tablet-based portable instrument which is capable of running several POC diagnostic tests and help in faster clinical decision. It incorporates a range of urine and finger prick based rapid diagnostic tests along with diagnostic algorithms and applications for patient registration and medical records. It is paired with smartphone- and cloudbased applications for patient registration, machine-learning based contextual diagnostic algorithms, medical records, payment, and referrals. Worked done can be classified as: 1. Integration- This included paneling, adding new features to HealthCube 2. Inhouse Validation- This includes the precision and accuracy studies done on diagnostic tests. 3. Troubleshooting- It included brainstorming for the issues being faced by us on field. 4. Quality Protocols-Working on IQC(Incoming Quality Checks) etc Tool used (Development tools - H/w, S/w): Excel, Data Analysis and Interpretation, Data Handling, Scientific Report Writing Objectives of the project: REAGENT INTEGRATION -Adding Specification to HealthCube Device Major Learning Outcomes: Got a hand on Microsoft Excel, Data Analysis an Interpretation, Report Writing, Quality Standards for Medical Products which include ISO 13548, ISO 9000 etc., also learnt to file Root Cause Analysis (RCA), CAPPA etc Academic courses relevant to the project: Biochemistry, Technical Report Writing, Probability and Statistics Name: Mrunal Bhattad (2015A5PS0950P)	2018- 19- sem1
HealthCubed India Pvt. Ltd., Bangalore	Research work has been done. A brief literature survey has been done to understand the basic principle and requirements of the new tests that have been incorporated within our tenure. Also, to resolve all the issues faced on the field, troubleshooting has been done for every complaint received. From the quality and regulatory perspective, documentation has been done in form of templates, lists, forms and records including reports. Eg. CAPA form, supplier evaluation list, FMEA records. Actual field exposure was experienced during clinical trials. Tool used (Development tools - H/w, S/w): MS-Excel, google spreadsheets and docs. Objectives of the project: HealthCube is the medical diagnostic device supporting 25 tests with the aim of creating solutions at Point of Care for healthcare. Our vision is to move the society from reacting to illness to managing wellness. Our objective is to develop new assays/tests so as to expand the portfolio of tests on our device and to make the device interface user friendly. Major Learning Outcomes: Excel, data analysis and statistics, documentation of records. Academic courses relevant to the project: Quality assurance and regulatory affairs, Biochemistry.	2018- 19- sem1
Here Maps	Worked on graph databases to handle complex spatial queries and also created a data flow pipeline to updtae the data stored in real time using Kafka queues. Also created a NodeJs application to make the complete setup user friendly by creating API endpoints for different purposes Tool used (Development tools - H/w, S/w): Neo4j, Java, Node js Objectives of the project: Execute complex spatial queries and update data stored in database in real time. Major Learning Outcomes: Java, Node js, exposure to Cloud platforms Academic courses relevant to the project: OOP, DBMS,DSA Name: Gautham Muppalla (2014B2AA0781H)	2018- 19- sem1
Here Maps	The project gives a core insight of the way the company's main tool works and gave me an opportunity to provide a new functionality. Tool used (Development tools - H/w, S/w): Eclipse, ELK Stack. Objectives of the project: Quality maintenance by providing a two-stage functionality for map-editing and capturing the changes. Major Learning Outcomes: Java Programming, ELK Stack Brief Description of working environment, expectations from the company: Good exposure to programming is needed, Java being the basic language. Having exposure to Machine Learning is also welcome as there are number of projects related to this field. Academic courses relevant to the project: JAVA, DBMS, ML Name: Aditya Agarwal	2018- 19- sem1
Here Maps	Lane detection using aerial imagery and dash cam imagery. I worked in the lanes team in Nesco office. My first problem statement was to build a black box which inputs an aerial image and outputs geo-referenced lane lines on it. My second problem statement was to detect lanes on dash-cam images. Tool used (Development tools - H/w, S/w): PyCharm, AWS, MapBoxStudio Objectives of the project: Lane Detection Major Learning Outcomes: Real world application of Neural Networks, Using TensorFlow, AWS services like EC2, EBS, s3 Brief Description of working environment, expectations from the company: They have an open door work environment. Best part about the company is being to able to solve a new problem everyday and hence I learnt a lot even when I had zero experience in working on deep learning.	2018- 19- sem1

Company	Experience	Year
Here Maps - A Nokia Company, Mumbai	Through the Practice School-II programme, I got to not only apply the skills that I've acquired over the past few years on campus, but also got my hands on new technologies that are relevant in the industry today. I feel fortunate to have gotten an opportunity to work in the field that I love - User Experience and Frontend Web Development. It enabled me to gain experience in building efficient UX components for web apps. I was constantly in talks with the UX/UI designers during the whole process. I learnt how the client requirements are carefully understood and design specifications are drafted. My job was to implement the components based on those design specifications. I got to not only hone my technical skills, but also gain an insight into the working of an organization. Like, I had a chance to actively involve in the Agile process of software development - taught as a part of our Software Engineering course. Also, I believe the 5 month term is appropriately long for one to develop that essional edge that is needed for one to confidently tackle real world problems. And working with my mentor, and the team, was surely a delight. The environment was very conducive to new ideas and a lot of learning.	2015- 16- sem1
Here Maps - Data Structures, Mumbai	osp rules,mapping the template Tools used (Development tools - H/w, S/w): scala,angularjs,spring mvc ,tomcat,postgres Objectives of the project: mapping the successfully Outcomes of the project: mapping successful Major Learning Outcomes: Scala,angularjs,springMvc Brief Description of working environment, expectations from the company: not bad Academic courses relevant to the project: OOPS	2017- 18- sem1
Here Maps - Data Structures, Mumbai	I helped my team Map Creation to migrate from existing system to a more efficient system. Tools used (Development tools - H/w, S/w): Java, Groovy, OOP Objectives of the project: To migrate towards a better and more efficient system. Outcomes of the project: Successfully created the supports for required features in new system. Major Learning Outcomes: Working with team, Testing codes, Debugging Code Brief Description of working environment, expectations from the company: The working environment was too calm and very friendly. Everyone was supportive and ready to help. The project never got hectic and it was fun working on it. Academic courses relevant to the project: OOP.	2017- 18- sem1
Here Maps - Data Structures, Mumbai	The following report talks about the working of the Product Validation Framework tool used by the Places team to validate map data. This report also covers the basic information on testing and debugging of the PVF tool to enhance its efficiency. Apart from this certain details on automated regression test have also been reported. Tools used (Development tools - H/w, S/w): Java,python,tensorflow,drools Objectives of the project: Validation. Outcomes of the project: Product Validation by Rules. Major Learning Outcomes: Rest services, machine learning algorithms, drools Brief Description of working environment, expectations from the company: Great working environment but company can offer more in terms of creative and innovative work to students Academic courses relevant to the project: OOPS, machine learning	2017- 18- sem1
Here Maps - Data Structures, Mumbai	I developed a WebApplication to which served as a Visualization tool for a database. Tools used (Development tools - H/w, S/w): Play framework, Scala, AngularJS, ProtoBuf, JavaScript Objectives of the project: Develop a tool for visualization of a database on Map Outcomes of the project: Successfully developed a WebApp which would help developers view and visualize database information on a map. This is essential for creating products for the company. Major Learning Outcomes: AngularJS, Scala and Play Framework. Brief Description of working environment, expectations from the company: The working environment is very good and encourages new ideas. Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
Here Maps - Data Structures, Mumbai	Was a good ps learnt a lot about software industry how things are done. Tools used (Development tools - H/w, S/w): Angular 4 npm typescript JavaScript Objectives of the project: To migrate here core modules in angular 4 from angular js Outcomes of the project: 2 modules completely done Major Learning Outcomes: Learnt a lot about front end development Details of papers/patents: No patents Brief Description of working environment, expectations from the company: Working environment was too good people were quite helpful. Academic courses relevant to the project: Nothing	2017- 18- sem1
Here Maps - Data Structures, Mumbai	Used Machine learning, DSA, OOP to predict parking in major cities Tools used (Development tools - H/w, S/w): python Objectives of the project: Predcitng on street parkings Outcomes of the project: parkings predicted in Here's system Major Learning Outcomes: Learnt Machine learning in detail Brief Description of working environment, expectations from the company: Nice culture, good work Academic courses relevant to the project: DSA,OOP, OS, Machine Learning	2017- 18- sem1

Company	Experience	Year
Here Maps - Data Structures, Mumbai	The Company is primarily a mapping company, I was a part of Map Creation team. They use deep learning to find Traffic Signs from the drive data, which is around 98% accurate as of today. So they need to do Image Review (manually checking whether Traffic Signs are accurate). My project was to automate this Process of Image Review by using just the previous accurate data. At first it seemed like a Supervised learning problem, so I tried various Supervised and SemiSupervised Algo's focusing on unbalanced data to get accuracy of around 80-85%. Then I tried to scale my models of larger data sets using AWS, but there was not much change in the accuracy. So I began the project once again from scratch from a completely different approach to traverse the map using graph database Neo4j and generating Association Rules using FP-Growth to generate rules of accuracy varying from 100% to 70%. The rules with 100% accuracy are directly being incorporated in Auto-Code and the rest will be used to increase pace of Manual Image Review. Tools used (Development tools - H/w, S/w): Python, R, Octave, Spark(PySpark), Amazon Web Services, UNIX, DB: [SQL, Mongo, Neo4j] Objectives of the project: Predicting Traffic Sign locations and thus automating the process of Image Review. Outcomes of the project: Was able to get Association Rules with accuracy ranging from 100% to 70%, the 100% accuracy rules will be directly incorporated in Auto-Code and the rest will be used to push the accuracy of Image Review. Major Learning Outcomes: Implementing Machine Learning and Data Mining Algo's using R, Python, Pyspark. Deploying them on Amazon Web Services. Brief Description of working environment, expectations from the company: Awesome environment pretty much everything(napping room,TT room, PlayStation) except for free food. Company is expanding and thus you get to learn about varied kinds of technologies and how the dynamics of a growing company works. They have been recently funded so they are flush with money so they entertain all kinds of innova	2017- 18- sem1
Here Maps - Data Structures, Mumbai	Testing and debugging of Product Validation Framework(PVF) tool, which is used for validation of location data. PVF is a web application which is to be used by the clients and the company to validate map data, which is in the form of xml files. I had to debug the business rules which were already present in the system and create new rules according to business requirements. There are rules specific to different types of products which are delivered. I worked on the rules specific to Places products and this version of the PVF has been released to production environment. Partial work is done on POI xml products. Tools used (Development tools - H/w, S/w): Java, Hadoop, MapRreduce, AngularJS Objectives of the project: To develop the PVF tool such that it works as required for all types of products. Outcomes of the project: Places xml products are being successfully validated by the use of PVF. Some rules specific to POI xml products have also been worked upon. Major Learning Outcomes: Working of the PVF tool,Hadoop and mapReduce. Brief Description of working environment, expectations from the company: The working environment at HERE Solutions India Pvt. Ltd. is very friendly and a lot of flexibility is provided when needed. The mentors are really helpful. There are outings and parties from the company too. I expected to get the experience for working in such a company, seeing the work done by me being used by the company and developing my personality in the process. Almost all of the expectations were met by the company to the full extent. Academic courses relevant to the project: Object Oriented Programming, DBMS. Student	2017- 18- sem1
Here Maps - Distributed Data , Mumbai	Worked on Java, springboot application, aws lambda, ECS, S3. Tool used (Development tools - H/w, S/w): Jdk-8, eclipse Objectives of the project: Enhancements to the tool/application the team has made. Major Learning Outcomes: Java, spring, VueJs, AWS, Hadoop. Details of Papers/patents: - Brief Description of working environment, expectations from the company: Flexible timings, great work culture and ethics, practicing agile. Academic courses relevant to the project: OOP, DSA	2019- 20- sem1
Here Maps - Distributed Data , Mumbai	NLP and Neural networks training of model to predict the object present in an image and write a descriptive textual story in form of 3-4 sentences. Training Image captioning model was a very fun task to pull off. Tool used (Development tools - H/w, S/w): TensorFlow, python, numpy, pandas Objectives of the project: Simplify the feedback process verification and keeping the map data fresh. Major Learning Outcomes: AI ML model training Details of Papers/patents: None Brief Description of working environment, expectations from the company: Very friendly and supportive people, work culture is attractive and enthusiastic. Flexible working hours and easily accessible resources. Academic courses relevant to the project: Computer programming, machine learning, neural networks and fuzzy logic	2019- 20- sem1
Here Maps - Distributed Data , Mumbai	I worked on a project that involved the skills of Python and Machine Learning(Object Detection) it helped me to learn more about AI ML. Then in my second project I made a chat bot using RASA that needs the skills of NLP that something new that i learned during my work. Tool used (Development tools - H/w, S/w): Python,ML,RASA Objectives of the project: To make a CHATBOT. Approximate placement of Traffic Sign Major Learning Outcomes: How to use ML and AI Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DSA,ML,OOP Student	2019- 20- sem1

Company	Experience	Year
Here Maps - Distributed Data, Mumbai	Development of web application for template mapping Tools used (Development tools - H/w, S/w): JAVA, Oracle Database, Apache Tomcat Objectives of the project: Development of product creation system Outcomes of the project: Reduction of workload on development team Major Learning Outcomes: Web Development Brief Description of working environment, expectations from the company: Project provided was good Academic courses relevant to the project: OOP, DBMS Student	2017 <sup>-</sup> 18- sem1
Here Maps, Mumbai	I worked on the User Interface of a software Tools used (Development tools - H/w, S/w): Javascript, angular JS, CSS, HTML, java Objectives of the project: To make the user interactive interface Outcomes of the project: Made a good looking user interface Major Learning Outcomes: Learned about how to make interactive user interface Brief Description of working environment, expectations from the company:Working environment is pretty cool, employees are very helpful, Although they didn't allot me good work to do. So from My experience i didn't learned much from this company from tools point of you. I was expecting more from the company and there is not proper training session in which you can learn something, the training session they provide is just waste of time, Student who are coming and didn't know any skill they will not able to learn from that type of training. And if they are not interested in taking you then they will treat like external person from company which is bad, atleast if you are not interested in taking then they should provide good project so that students can learn and that will help them in placements.	2016- 17- sem1
Here Maps, Mumbai	Developed a software in Java which extracts data from an Oracle database using SQL queries and appends it to a text output file according to user specified details. Tools used (Development tools - H/w, S/w): JAVA, Maven, and SQL Objectives of the project: To develop a software that extracts data from an Oracle database and appends it to a text output file according to the mapping details provided by the user. Outcomes of the project: Developed the basic structure of the software. A few essential features still need to be added. Major Learning Outcomes: Learned the terminologies and methodology of producing a software. Learnt about Basic JAVA programming, SQL Queries, concepts of multithreadingand JavaScript engines. Brief Description of working environment, expectations from the company: HERE Maps is a very good place to work at. The employees are friendly and helpful. Office timings are not fixed and there is no restriction about dress code. Therefore, one may plan their work according to their own convenience. The work culture here is really helpful in learning.	2016- 17- sem1
Here Maps, Mumbai	Designed a webpage according to the requirement of the project. Tools used (Development tools - H/w, S/w): HTML/CSS, Javascript and Jquery Objectives of the project: The objective was to design a software and automate the process of converting data from the database to various formats. Outcomes of the project: A webpage that is user interactive and user friendly. Brief Description of working environment, expectations from the company: The working environment is very conducive for working purposes and helps to deliver 100%. Mentors in HERE are very experienced and are very helpful.	2016- 17- sem1
Here Maps, Mumbai	Create a custom POIToPlaceXML Map-reduce job which converts POI formats into Place XML. There are three types of mapping for POI to Place XML format 1. Simple Type: It is a direct mapping from POI to Place XML. 2. Rule Based Mapping: Apply some formatting rules on POI attributes and the result is mapped to Place XML. 3. Lookup Based Mapping: Use a lookup file to find the corresponding value in Place XML. Example: the mapping of ISO language codes into corresponding BCP-47 language code in Place XML. Each POI Xml has 7 major elements namely: Contacts Name Category Chain Relationship Extended Attributes Rich Attributes Every child element from poi xml is mapped to place xml using Adeptia tool. My job was to prepare JAVA Objects for poi xml data and prepare a unit test to check whether the mapping is done properly or not. I also prepared the excel document depicting the whole mapping for any future use Tools used (Development tools - H/w, S/w): ECLIPSE, HADOOP SERVER, XML COMPARATOR, and ADEPTIA Objectives of the project: This project aims at mapping different POIs to Place XML using MAP REDUCE job. It also involves properly documenting the whole mapping process. The company aims to move away from the traditional adeptia tool and find a better way of handling the mapping process. Outcomes of the project: A custom mapping for POI TO PLACE WAS designed and got into production. Major Learning Outcomes: BASIC HADOOP, O.O.P., XML, BASIC SQL Brief Description of working environment, expectations from the company: Environment is quite friendly and we were treated equally to the employees. I was given ample time to learn and complete my project. Office hours were flexible as long as you are doing your job and you just have to inform the manager beforehand for a leave without any pay cut. Could have had a better mentor though.	2016- 17- sem1

Company	Experience	Year
Here Maps, Mumbai	I contributed to natural guidance using image processing as well as automated the natural guidance tool. Tools used (Development tools - H/w, S/w): Eclipse, JAVACV. Objectives of the project: Fully automate the natural guidance tool Outcomes of the project: It will significantly reduce the time and effort to complete every single task that my team does. Major Learning Outcomes: Understanding of object oriented programming concepts, computer visions, image process using java. Brief Description of working environment, expectations from the company: I found it very comfortable working here. There were great learning opportunities, my mentor was really helpful to me and I learnt how to work in team and to get the best out of team work.	2016- 17- sem1
Here Maps, Mumbai	Have written java code (Java developer) for a task given. Built a user interface (Both Front-end and Backend). Documented many important things that are uploaded on the internal wiki page. Tools used (Development tools - H/w, S/w): Eclipse Objectives of the project: Performance enhancement, User Interface. Outcomes of the project: User Interface, Performance enhancement. Major Learning Outcomes: Java, SQL, JS, HTML, CSS Details of papers/patents:Uploaded documentations on the internal wiki page of company Brief Description of working environment, expectations from the company: This short span of around five and half months as an intern played a crucial role in bridging the gap between theoretical and conceptual knowledge we get, and practical one. It helped me understand the workings and organizational culture and behavior in a global level. Besides my communication skills are also strengthened. Apart from that, I had also developed my programming skills through various programs I have done. This helped me sharpen my skills in java since most of the source code I worked on is hard coded in java. In sum, the actives that I learned during this short span are useful for me in future to face challenges in working environment. Throughout the industrial training, I found that thinking out of box, time management, goal management and colleague interactions are very much important. Courses like Java, DBMS, have been very useful in grasping things easily. In my free time, I'm leaving no opportunity to venture into learning new things from online courses. In a nutshell, this internship has been an excellent and rewarding experience and I'm looking forward to making the best of this.	2016- 17- sem1
Here Maps, Mumbai	Worked in various fields like Databases, Algorithms and Data Structures, Networking. Developed a load testing tool to check read and write performance. Developed and deployed a web service to run multiple sql queries on multiple servers and compile resultant data. Developed and deployed a tool to automate python integration testing on JSON properties of various CMS endpoints. Tools used (Development tools - H/w, S/w): Locust for Performance and Load Testing. Apache Maven for deployment of web services. Eclipse for developing projects in Java and Python. Objectives of the project: Create a tool to assess performance. Help ease and automate the tedious task of writing test cases. Develop a useful tool to run multiple sql queries on multiple servers and compile data together. Outcomes of the project: Helped the company by completing 3 major projects and various other small tasks which would have been lying in the TODO list had I been not present. Major Learning Outcomes: My skills in the Computer Science domain have increased many-fold. My manager helped me with developing skills by giving work in all the different fields of Computer Science and gave a lot of training. I attended all the team meetings and they were really useful. Brief Description of working environment, expectations from the company: The working environment is really cool. There are no fixed timings and no compulsorily formals for work. My manager and mentor were really helpful. There is a PS4 room, a TT room and a Nap Room and you can use them whenever you feel like relaxing. The work given was completely from Computer Science domain and it really helped me expand my knowledge. The company expects you to know basics of Databases and Object Oriented Programming and experience in Java. It is really helpful if you know shell scripting and python scripting, majority of the work however is in Java and Maven.	2016- 17- sem1
Here Maps, Mumbai	I was working with community team. My main work was related to configuration of different versions of existing code and configuring different tools with it. I worked loads testing and documentation of the web service. Tools used (Development tools - H/w, S/w): I had to user two tools. First of them is called SWAGGER. In my second task which was related to load testing of the system, I had to use a new top. Named Gatling. Objectives of the project: My first task was supposed to give a well-documented dynamic user interface of the current web service. In my second I was supposed to give a system performance base. Line under stress. Outcomes of the project: As a result of my first task, company got a dynamic UI that is easy to use and well documented. As a result of my second task, I had created an environment for system performance base line under stress using Gatling tool. Major Learning Outcomes: In coding perspective, I did not learn anything. All the work was oriented towards configuration. I did learn some architecture related things like maven. Brief Description of working environment, expectations from the company: Environment is quite good and relaxed. I met some really amazing and talented people. Company is expanding so there are some PPO opportunities although that completely depends on which team you get into.	2016 <sup>-</sup> 17 <sup>-</sup> sem1

Company	Experience	Year
Here Maps, Mumbai	Modelled data in order to observe associations between features in the map and derive rules of association using Apriori Tools used (Development tools - H/w, S/w): Java8, Neo4j, R Objectives of the project: Represent data in a way to derive rules of association between features in the map Outcomes of the project: How different features in a map are associated with each other Major Learning Outcomes: Databases and proficiency in Java Brief Description of working environment, expectations from the company: It is a great place to learn and contribute. The managers and other team members are very friendly, willing to give the interns an ample amount of time to help with the projects despite their very busy schedules. The projects are very skill effective and they help us improve our own skills at an efficient pace. The company expects sincere, hardworking students with good work ethic and will to learn as their interns and they help the interns strive to be the same.	2016- 17- sem1
Here Maps, Mumbai	Customising activiti for performance optimization. Tools used (Development tools - H/w, S/w): Eclipse, PostgreSQL, Sublime Objectives of the project: To increase the performance of query processing. Outcomes of the project: Faster outcome of the task assignment after processing. Major Learning Outcomes: Activiti, Database optimization, Postgres Brief Description of working environment, expectations from the company: The organization provides a perfect working environment. The employees working at HERE are very friendly and are always ready to help. In short, It is a good company to work with for computer science students and it was a great journey being an intern at HERE Solutions. Student	2016- 17- sem1
Here Technologies	I was required to develop a parking sign classification model using deep learning and introduce parallelization using Multiprocessing library in Python for optimizing the output time and memory. A month into the internship, I pivoted to text recognition strategies and basic NLP to make sense of parking sign data. By the end of the internship, I was optimizing the DL and NLP models and using basic classifiers to cluster data points which would be combined with the models for verification, completing the pipeline. Tool used (Development tools - H/w, S/w): Python, AWS, Jupyter Objectives of the project: Creating an end to end pipeline for making sense of parking signs. Major Learning Outcomes: Practical application of deep learning model, Knowledge of hyper parameter tuning, Parallelization techniques, basic NLP, AWS familiarity Brief Description of working environment, expectations from the company: The working environment is very relaxed and you wont find yourself stressed irrespective of whether you find your work interesting or not. Work hours are flexible, the only expectation is that you think scientifically about solving the problem assigned to you and pace yourself well with the rest of your teammates so that there are no backlogs. There's a huge focus on exploring novel methods to harness useful information out of the data available and if you are lucky you might find very exciting work too. For the unfortunate ones, there's a PS-4 and TT table. Academic courses relevant to the project: Machine learning, Digital Image Processing, Neural Networks and Fuzzy Logic Name: Vatsal Bhanderi (2015A7PS0008G)	2018- 19- sem1
Here Technologies	The main idea of the app was to take the user's GPS location, i.e. latitude and longitude coordinates, using the location services from the user's device, and showcase the nearby Places of interests around the user. The data is wrapped around with Augmented Reality, to make the app more appealing and attractive. Tool used (Development tools - H/w, S/w): Unity, C#, Vuforia Objectives of the project: Build an app which can show the user the Places of Interests nearby them. Major Learning Outcomes: Unity, Augmented Reality Brief Description of working environment, expectations from the company: The working environment is very relaxed and you wont find yourself stressed irrespective of whether you find your work interesting or not. Work hours are flexible, the only expectation is that you think scientifically about solving the problem assigned to you and pace yourself well with the rest of your teammates so that there are no backlogs. There's a huge focus on exploring novel methods to harness useful information out of the data available and if you are lucky you might find very exciting work too. For the unfortunate ones, there's a PS-4 and TT table. Name: Lohith Karlapudi	2018- 19- sem1
Here Technologies	Pattern recognition in Human Behavior to eliminate any kind bias shown by a QA towards a user. Tool used (Development tools - H/w, S/w): Python, Excel. Objectives of the project: To eliminate any kind bias shown by a QA towards a user. Major Learning Outcomes: Machine Learning on an industrial level. Python and SciKit learn Libraries. Brief Description of working environment, expectations from the company: A really good company. Not too much pressure on completing the project rather they focus on trying out something new and also encourage learning. Academic courses relevant to the project: NNFL, ML, Data Mining.	2018- 19- sem1

Company	Experience	Year
Hero MotoCorp, Neemarana	For my Direct Area project, Productivity improvement through waste elimination in Engine Assembly Scooter Line, I had to do work study of the Engine Assembly process, make standard formats based on waste elimination methodology and improve productivity by either work redistribution or by work reduction. Apart from that I also made variable volume setup and implemented them on assembly line. I also made setups for multi model production on a single production line. For my Indirect Area Project, I redesigned the layout for Waste Management Yard. The major constraints being lack of space for adding new machines and facilities. Apart from that the new design should also decrease material and operator movement & optimize operator efficiency. Tool used (Development tools - H/w, S/w): Standard formats for Waste Elimination Methodology, Handheld video camera for making process videos and measuring tape for measurements Objectives of the project: Direct Area Project: Improve productivity of Engine Assembly Line to reach company target: Indirect Area Project: Space Optimization Major Learning Outcomes: I can now do independent Work Study of an assembly line, make setups for assembly line depending on the demand, have knowledge of waste generated during manufacturing process & how to treat those waste in a practical & economical manner. Brief Description of working environment, expectations from the company: Learning and Result driven environment where all the senior members are helpful and eager to share their knowledge of the area they are managing. Similarly, efforts are expected from the students to be punctual and efficient in their projects. Academic courses relevant to the project: Production Planning and Control Student Name: Mohit Chandel	2018 19- sem
HINDALCO INNOVATION CENTRE	Analysis of aluminum rolling data and development of tools related to it. Tool used (Development tools - H/w, S/w): R Studio. Objectives of the project: To develop tools to analyze aluminum rolling data using Rnprogramiing language Major Learning Outcomes: Learnt R programming Learnt statistical analysis Learnt graphical analysis Brief Description of working environment, expectations from the company: Good working environment. Everyone is helpful and nice. Academic courses relevant to the project: Material Science, Metal Working and Machining, Computer Programming Development Centre	2018 19- sem <sup>2</sup>
Hindalco Innovation Centre - Semifab, Taloja , Mumbai	Strength analysis of architectural extrusion sections in window frames was done as the project. It consisted of deflection analysis, various loading conditions, buckling analysis and safety analysis. A study of aluminium tensile testing was done before the analysis. There are different kind of window sections made for different conditions and all have a different strength. The analysis was done based on Indian Standard Code and some reference books like Strength of Materials. Tool used (Development tools - H/w, S/w): Universal Testing Machine (UTM), Advanced Excel Objectives of the project: To provide a safety measure of a window section. Major Learning Outcomes: Team work, research and development, academic research, analytical view. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment was great. There is a good amount of industrial exposure that can be experienced here. The office was a two in one space with lab equipment on one side and working desk on the other. The employees of the department were very helpful. Academic courses relevant to the project: Mechanics of solids, Advanced mechanics of solids Student	2019 20- sem
Hindustan Unilever Research and	We have worked on developing a preliminary model for fluidised bed dryer which can help in predicting the drying kinetics based on the drying conditions of the fluidised bed dryer. We have estimated the parameters in model by doing different set of experiments with varying drying conditions and model predictions were done and compared with experimental work. Tool used (Development tools - H/w, S/w): MATLAB for Model predictions Objectives of the project: Finding the effect of drying conditions on rate of drying and then optimising the design or operation of dryer through model Major Learning Outcomes: Modelling work, Model development, what kind of challenges and how to solve those challenges. Brief Description of working environment, expectations from the company: For me, my manager has given freedom on what kind of model to use and also what experiments to do for parameters estimation in model. They company expects dedication, smart work, sincerity in putting right kind of efforts towards the work and punctuality. Academic courses relevant to the project: Drying, mass transfer, heat transfer, chemical process calculations. Name: Priyanka Prajapat	2018 19- sem

Company	Experience	Year
Hindustan Unilever Research and	In Photodynamic Therapy, the absorption of light by a chromophore generates cytotoxic species such as reactive singlet oxygen, leading to irreversible destruction of the treated tissue. The measurement of the singlet oxygen quantum yield ( $\phi\Delta$ ) is an important determinant used to evaluate the efficiency of new photodynamic therapy agents developed in the laboratory, to screen potential photosensitizers in aqueous media. The majority of the existing $\phi\Delta$ values found in literature for various photosensitizers are documented with the sensitizers in organic solvents though values in aqueous media are more valuable for PDT applications. Determination of accurate and precise $\phi\Delta$ values in aqueous solution is a much more difficult problem than in organic media. There are many methods for the measurement of Singlet Oxygen quantum yield measurement but most of them are applicable for measurement only in organic solvents. And those methods which are applicable for measurement in aqueous media require the use of expensive instrumentation like IR luminescence. Hence a method for quantum yield determination which is approachable with feasible laboratory instruments is attempted to be discovered. Tool used (Development tools - H/w, S/w): UV Vis Spectrometer, Spectrofluorometer Objectives of the project: Quantum yield Determination of photosensitisers in aqueous media Major Learning Outcomes: Kind of Attitude required to carry out research work. Brief Description of working environment, expectations from the company: Working environment is very good, but how you will proceed in your work completely depends on your guide. People are very kind and always ready to help to the extent possible. Academic courses relevant to the project: Kinetics and Reactor Design, Physics, Chemistry Name: Satyaki Roy (2015A1PS517P)	2018- 19- sem1
Hindustan Unilever Research and	Project was on the investigation of the behavior of foam generated by different surfactant mix and its interaction with oil was studied. Various experiments were done to understand the difference in behavior of foam in presence of oil. Tool used (Development tools - H/w, S/w): Foam Shaker, Film apparatus, Turbidity meter, Force Tensiometer, Excel. Objectives of the project: Studying difference in foam behavior in presence of oil, and explaining the phenomena Major Learning Outcomes: Knowledge of Surfactants, Research Experience Brief Description of working environment, expectations from the company: In an organization, one would expect team interactions. That was not the case here, the project felt more like an academic project. Mostly people are helpful and very knowledgeable, but since work was to be done mostly alone, didn't feel like organizational work. Name: Harshit Kumar Sinha (2014B2A10888G)	2018- 19- sem1
Hindustan Unilever Research and	Aim of my project was to study the effect of different salts on foam volume and foam stability. Binary surfactant mixture consisting SLES (1EO) and NaLAS were studied in the presence of different sodium and magnesium salts. All measurements were done at two different pH to understand the effect of pH on foamability and foam stability. Film thinning was studied using spectrophotometer and light source setup. Tool used (Development tools - H/w, S/w): Automated foam shaker, Force tensiometer, Spectrophotometer. Objectives of the project: understanding the effect of counter ions and co-ions on the drainage and stability of liquid films. Major Learning Outcomes: Learning about different surfactants and analyzing different surfactant system. Academic courses relevant to the project: Physical Chemistry IV, Chemical Experimentation II. Name: Rakshith Chandra M S (2014B2A10791G)	2018- 19- sem1
Hindustan Unilever Research and	Modelling indoor air quality: my work included simulating models for transport of contaminants from ambient to an indoor space through doors, windows, cracks and effective removal of these particles using air purifiers. Tool used (Development tools - H/w, S/w): CONTAM 3.0 Objectives of the project: To prepare concentration profile and effects of concentration sinks. Major Learning Outcomes: Learnt about CONTAM, Particulate matter and their transport through advection and diffusion. Effective removal using forced settling methods Details of Papers/patents: CONTAM- nist usa Brief Description of working environment, expectations from the company: Working environment is good. All the experiments can be planned accordingly without any hurry. There is not much workload as it is a research centre. Academic courses relevant to the project: Transport Phenomena and mass transfer Name: D L Sahithi (2014B2A10816H)	2018- 19- sem1
Hindustan Unilever Research and	Chain length of surfactant molecule versus surface tension analysis of Quaternary Ammonium Compounds (QACs) was carried out. The challenge was to separate the pure product from the reaction mixture to measure the pure surfactant's effect on surface tension of water. Different characterization methods and separation methods were employed to confirm the purity of the final product after successfully separating the product. An attempt to model the same has been initiated. Tool used (Development tools - H/w, S/w): Spectral analysis tools such as UV-vis and IR spectrometer, Surface tensiometer. Objectives of the project: Synthesis of quaternary ammonium silyl (QAS) salts and analysis of their effect on surface tension of water. Major Learning Outcomes: Chemical synthesis optimization, choosing appropriate characterization methods, problem-solving approach. Brief Description of working environment, expectations from the company: It has a great scope of learning in terms of both technical skills and soft skills. More often than not, scientists are open to new ideas from students. It would be a good place to start if you are genuinely interested in research. Academic courses relevant to the project: Organic Chemistry, Instrumental Methods of Analysis, Material Science.	2018- 19- sem1

Company	Experience	Year
Hindustan Unilever Research Centre , Bangalore	I was assigned to the Digital Research and Development department. The work was based on Machine Learning applications. I worked on the project, "Application of Machine Learning in Chemical Engineering". Tool used (Development tools - H/w, S/w): Star ccm+, python, MATLAB Objectives of the project: The objective was to show the prediction capabilities of Neural Networks. The program had to mimic the simulation soft-ware without being explicitly told about the physics behind the test case. Major Learning Outcomes: Basic programming on python, MATLAB and introduction to Machine learning. Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: Work environment is well suited for an intern. Work hours are flexible and the campus has all the facilities. People are helpful and the interns have freedom to make changes in the direction of the project they are working on as long as it is logical and feasible. Academic courses relevant to the project: Modeling and Simulation, CFD	2019- 20- sem1
Hindustan Unilever Research Centre , Bangalore	Understanding complex phase diagrams of surfactants using rheology measurement as a tool and substantiation through microscopy/Static light scattering. 1) Studied about the Basic Properties of Surfactants 2) Studied about the Phase Behavior of Surfactants 3) Studied about the Microstructural Properties of Surfactants 4) Studied about the effect of Different Ratio of Surfactant Mixtures on Phase Diagram. 5) Studied about the effect of Addition of Organic Acid on Different Ratio of Surfactant Mixtures and then examining its Microstructural Properties. 6) Studied about the effect of Mixture of Organic Acids on different ratio of Surfactant Mixtures. 7) Studied about the effect of Adding Different Concentration of Organic Acid in Same Surfactant Mixture. Tool used (Development tools - H/w, S/w): Rheometer Objectives of the project: Understanding complex phase diagrams of surfactants using rheology measurement as a tool and substantiation through microscopy/Static light scattering. Major Learning Outcomes: Surfactant Phase Behaviour and Rheology concepts including flow and oscillation curves. Details of Papers/patents: Brief Description of working environment, expectations from the company: It has an environment that allows for the use and growth of our established skills and qualities. It highlights our desire to work in a team-oriented workplace and talk about our work-style and try to word our answer so that it blends in well with the company's vision. Overall it was fun, exciting, innovative and challenging task during my project tenure which I enjoyed. Industrial experience isn't just about working on projects or other academics related stuff. It is about the etiquettes and manners to work in a corporate environment, how to manage ourselves formally, learning to live by the company rules and regulations and learning to behave accordingly. That switch of lifestyle is what defines industrial experience. Also the capability to think out of the box, practicality as well as problem handling efficiency are also requi	2019- 20- sem1
Hindustan Unilever Research Centre , Bangalore	This project was taken up as a part of home care department of Hindustan Unilever Research Centre, Bangalore. Certain rheological aspects of various surfactant systems were measured. Predominant behavior of the surfactant systems was determined and Viscosity Flow Curve measurements along with Herschel Bulkley modeling were used to determine the yield stress. Single surfactant systems and mixed surfactant systems of various concentrations were studied. Effect of counter ion on yield stress was also studied. Tool used (Development tools - H/w, S/w): Rheometer, Centrifuge, Vortex mixer, Overhead stirrer. Objectives of the project: To study the basic properties of surfactants To understand the rheology and study viscoelastic behavior of various surfactant systems To determine the yield stress in commercially known single surfactant systems Major Learning Outcomes: Learned to operate rheometer and explored a bit into rheology. Learned the operation of couple of other instruments. Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: It's was overall a very good experience. A very good station for training in industrial research. Safety protocols were followed strictly	2019- 20- sem1

Experience Year Company Zwitterionic surfactants have a strong interaction or complex formation with anionic surfactants in aqueous solutions. Mixtures of anionic and zwitterionic surfactants have been studied and show strong synergistic behaviour through their superior surface activities such as lower surface tension and critical micelle concentration, in comparison to individual surfactants at the same concentration in aqueous solution. The strong synergistic interaction between anionic and zwitterionic surfactants could be due to the strong electrostatic attraction between these molecules. So we conducted experiments to determine this quantitatively 1) We studied 7-8 surfactant mixtures and calculated their interfacial surface tension using spin drop tensiometer with two oils (sunflower oil and model sebum). 2) Then we calculated the critical micelle concentration to determine the impact of electrolyte on anionic surfactant and anionic / zwitterionic surfactant. 3) We studied adsorption on fabric (cotton) of anionic surfactant in the presence of zwitterionic surfactant to determine the change in its adsorption rate. 4) We tried to study three phase contact angle of anionic and zwitterionic surfactant system but time didnt permit further analysis Tool 2019-Hindustan Unilever Research used (Development tools - H/w, S/w): Spin drop tensiometer, Drop shape Analyser, PH meter, titration 20-Centre, Bangalore equipments, Objectives of the project: Study IFT and CMC for the surfactant systems – Anionic vs Anionic sem1 + Zwitterionic: Impact of zwitterionic surfactants on the adsorption of anionic surfactant on a cotton fabric. Three phase contact angle: understand the system and study LAS-ZI system for Major Learning Outcomes: We learned from our experiments that addition of zwitterionic surfactant to an anionic surfactant enhances the surfactant properties by lowering the surface tension, lowering the critical micelle concentration and by enhacing the rate of adsorption on a Details of Papers/patents: No papers published Brief Description of working environment, expectations from the company: This internship was an enriching experience. This research centre here has up to date equipments and the research undertaken here is ground breaking. There is a proper connection between the co workers and our mentors are easily approchable. Academic courses relevant to the project: The work which we did here needed strong grasp of the basic concepts of chemistry. Subjects related to this field: mass transfer, Engineering chemistry, Fluid mechanics, Numerical methods Student Developed a runback that performs health checks on a cluster. Objectives of the project: To be proactive on cluster analysis Outcomes of the project: Successfully performed health checks on HDFS components Major Learning Outcomes: Python, Cluster analysis Brief Description of working environment, expectations from the company: The working environment is employee friendly and everyone is very helpful. It is always better to know python beforehand and also a little knowledge on how big data works. Faculty Comments: Expectations from industry: Expectations from the industry - As a hotel revenue management company, IDeaS uses a variety of forecasting and data analysis modules for prediction. it contains many departments to carry out forecasting the value of the rooms of the hotels. One of them is TechOps, which is responsible 2016-Hortonworks, Bangalore for monitoring the functioning of product deployment from the Software Development Department to 17the clients and work on the smooth functioning of the products on the available environments. Managing sem1 the databases is also one of the major responsibilities of the department. The organization also provides other services like hosting sites, maintaining them and keeping regular backups. Also it provides the facility to integrate various third-party softwares, applications and facilities. Among them are the PMS services provided by Oracle, SMS etc. It is the job of the company to maintain the integrated third-party facilities along their own facilities. This integration of third-party facilities is also done manually by filling in all the details manually over and over again and running multiple scripts to ensure that the subscriber is provided the third-party facility. Student Worked on categorization of patents in excel, prepared patent digests, evidence of use reports, prior-art search reports and also performed technology landscape analysis. Tool used (Development tools - H/w, S/w): Excel, Powerpoint, Word, Orbit Inteliigence, Google Patents Objectives of the project: Patent Analytics Major Learning Outcomes: Advance Excel Brief Description of working environment, 2018-Hourglass Research expectations from the company: The working environment is great at Hourglass. You can approach anyone 19for whatever problems or issues you are facing and they will simply help you out. For most of the time I sem1 worked under 3 senior members of Hourglass and it was a great experience working with them. At Hourglass people had fun as well apart from working for hours. Overall, it was a great learning there and a great experience as well.

Company	Experience	Year
Hourglass Research , Mumbai	Various activities like prior art searches, screening and categorization of patents, patent landscape analysis, technology scouting, patent infringement analysis, mapping own portfolio for impact analysis, mapping and generating EoUs for infringement analysis, creating patent digests and doing patent-ability searches were done as a part of this project. The different sections of a patent, life cycle of a patent, and the timeline of a patent were studied. Using search strings to create suitable search strategies was done as a part of this project. Proficiency in using software namely, Orbit Intelligence, Google patents, MS Office, etc., was also achieved. Tool used (Development tools - H/w, S/w): Orbit, Google Patents and Microsoft Office Objectives of the project: The objective of the project was to have a first-hand experience of the Patent Analytics work and how it impacts the intellectual property assets. It included performing prior art searches, screening and categorization of patents, impact analysis, techno Major Learning Outcomes: Major learning outcomes included learning about patents and intellectual property, working of orbit, google patents and also included learning the methodology of prior art searches, landscape analysis, impact analysis, technology scouting, patent digest a Details of Papers/patents: None Brief Description of working environment, expectations from the company: The organization is a startup and the working space is a small office. Individual Working stations are allotted at the date of joining. The company provides all necessary amenities for the required work. Academic courses relevant to the project: None	2019- 20- sem1
Hourglass Research , Mumbai	I worked on the various phases that an IP (mostly patents) goes through. Multiple projects on infringement cases, impact analysis, prior art search and digest generation were undertaken by me. Tool used (Development tools - H/w, S/w): Excel, Google Patents and Obit Intelligence Objectives of the project: Get a basic idea of how the IP industry work. Basics of certain analysis tools used in the industry were also touched upon. Major Learning Outcomes: Excel, Google Patents and Orbit Intelligence Details of Papers/patents: Confidential data. Brief Description of working environment, expectations from the company: The work environment is very encouraging. The whole office is very supportive. The company expects you to be meticulous with your approach. You will mostly deal with patents. Developing a quick and detailed understanding of a patent is essential. Academic courses relevant to the project: Not Applicable Student	2019- 20- sem1
Housing.com (Locon Solutions Private Limited), Mumbai	People have argued that, as an intern, I have seen more in five and a half months than a regular person might see in more than 10 years in his career. If I sit back and count the things, then maybe three CEO's, countless start-up struggles, watching the friends I made get laid off, the innovation, the parties, and last, but, by no means the least, the people is maybe too much for five or so months. But it's all a part of this world. This dynamic, fast paced, and in my opinion, amazing world. We hit the ground running in our first week at here. We were assigned projects and were expected to familiarize ourselves with the stack fairly quickly. There was no moment where we were considered less capable because we were interns. That gave us an immense boost and push to code and contribute. In my first two weeks I contributed 900 lines of code and was already intimately familiar with some parts of the repository. The most impactful thing I've learnt as an intern is the approach to solving problems. There has to be an attitude of immense relentlessness amongst interns. Most students who are trying to contribute code to many open source projects usually get dejected, because of a roadblock in their first few days. One must remember that many people have faced the same road blocks, and Googling and seeking help is completely accepted, and in fact, encouraged. The industrial internship is one of the finest places to see the "hacks" that people implement in crunch times. It's great to realize what actually matters and what doesn't. You come to realize that memory complexity isn't as important as it is in college. Time is important. One of the other major things one learns is how to install things and setting up an environment. That is usually the first roadblock when people start to code. And more often than not, it's pretty easy to go wrong. One needs to be persistent. All said and done, my time at Housing was a wonderful experience. I made a lot of friends and I learnt cool, new tech that I might not have learnt at othe	2015- 16- sem1

Experience Year Company and the freshers that had joined along with us, as an investment. He was a constant help throughout the internship program. I was given the app's source code and I along with the other freshers, Vinil and Rohit, in the Android team began understanding it, package by package. Ravi was always there to help us understand code we did not understand. Just by reading code one gets to learn so much. Various code practices used in organizations, smarter ways of doing the obvious steps, managing space and time complexity. The first code snippet written by me was pushed into Housing's main Android app somewhere in August. It is a special feeling when your code goes into production and such a platform is given by both PS-II and Housing.com policies. I learned a lot during my stay here. Most of us have a clear field that we would want to follow by the end of PS-II. I too was able to get a clear path of what I wanted to do. Having coded basically in Android, I got to learn a lot about Java and how to efficiently write it in Android. PS-II is a great experience before our placements. I got a lot of exposure about different potential fields which I could work in future and this was only possible because of PS-II. I got to know how actually one works in a essional environment and yet having much fun as interns. Utsav Tiwary (2011B4A7651P) Discipline: Computer Science I did my Practice School (II) at Housing.com in the first semester of session 2015-16. Housing.com, founded in 2012, has been working actively to solve India's real estate problems of buying, renting and selling properties by making the entire process seamless and completely online. With humongous amounts of data being generated through their online platform each day, it becomes imperative to mine the data for knowledge discovery and leverage it to improve the overall user experience and generate it for the company. Housing's backend is a polyglot system with numerous microservices written in Django, Rails, Flask etc. Data storage is done using MongoDB, Postgresql, Elasticsearch, Redis and Memcache for caching. These are technologies which a person just hears about in college. The main takeaway was to actually work on these technologies in real life. Identifying points of failure, optimizations to achieve speed-up in data access, using version control to make changes to a large repository, adopting best practices for software development in general were some of the key learnings. Learning about the workflow - conceptualizing and planning a product, writing clean, modular code with documentation, pushing it to production post peer-review and monitoring the performance to identify issues that could possible arise - will definitely help in transitioning from academia to industry. Analytical thinking was a key requirement for the projects. Machine learning techniques were used to full 2018fill the business requirements. Tool used (Development tools - H/w, S/w): Python, SQL, Excel Objectives of **HSBC EDPI** 19the project: Full filling the business requirements. Major Learning Outcomes: SQL Brief Description of sem1 working environment, expectations from the company: Descent working culture I worked in the credit risk model monitoring team which is a part Wholesale Credit Risk Model Development Team. The team deals with regular monitoring of AIRB models for credit risk. The end user of the model monitoring report is the model owner, who is responsible for the performance of model. My project dealt with automation of model monitoring process using software tools. The first step in the project was to finalize the metrics that would be reported in the model monitoring report. This step required multiple discussion with various stakeholders (model owner, policy team, input data providers). After completing the first step, the conclusion was to report a specific small set of metrics, and allowing user to toss and turn the data according to their requirements. Tableau was figured out to be the most 2018-**HSBC Global Analytics** suitable tool for this kind of self service dashboard. The last step was to implement the requirements in 19-Center, Bangalore tableau and receive feedback from higher management. Tool used (Development tools - H/w, S/w): SAS, sem1 Python, R, Excel, Tableau Objectives of the project: Validation of Credit Risk Models for Wholesale Portfolio of HSBC Major Learning Outcomes: Good understanding of Advanced Internal Risk Based Credit Risk Models Brief Description of working environment, expectations from the company: HSBC has reputation of being one of the most employee friendly banks in the world. In my short stint at HSBC, I participated in multiple sports events (badminton and cricket) and joined couple of committees related to cultural activities. My experience with the organization has been nothing short of spectacular. Academic courses relevant to the project: Financial Risk Analytics & Management, Fundamentals of Finance Business development of a Virtual Reality Product called iB Cricket Tool used (Development tools - H/w, S/w): iB Cricket Game equipment - HTC Vive Set and Oculus Objectives of the project: Brand Management of iB Cricket Major Learning Outcomes: Being proactive in every task you take up. Working in a team and leading a team. Drafting business proposals Negotiations Setting up the processes Details of 2019iB Hubs, Hyderabad Papers/patents: Brief Description of working environment, expectations from the company: A very 20healthy ecosystem with a beautiful vision of making India a Global leader in Industry 4.0 technologies sem1 where integrity is the utmost priority to everyone and the culture, quality of the team here is the key which is boosting the company to create wonders across the globe. Academic courses relevant to the project: Organizational psychology Student

Company	Experience	Year
IBM Bangalore	Practical: Rest API, Testing, back-end, SSL Certificate Extraction. Theory: Dev Ops, Cassandra, SOAP, Oauth2, SAML, Spark, Hadoop, ETL, 7-8 certification courses offered by IBM Tool used (Development tools - H/w, S/w): Java, Linux Bash Objectives of the project: Project 1: write REST APIs and automation in JAVA, Project 2: Risk Assessment for X.509 certificates Major Learning Outcomes: Learnt and understood various software development technologies and software Academic courses relevant to the project: Object Oriented Programing, Database Systems, Software engineering, Operating Systems	2018- 19- sem1
IBM India Software Group , Pune	Developed a new API service for securing cryptographic keys. It was team project. We developed everything from scratch and deployed it into IBM cloud. I worked as developer, designer and tester of this project. Tool used (Development tools - H/w, S/w): Java, JavaScript, Typescript, Python, YAML, Kubernetes, Docker, Linux shell Objectives of the project: Management and security of cryptographic keys Major Learning Outcomes: Cryptography and Cyber Security Brief Description of working environment, expectations from the company: Work environment is good. People are nice here. No specific dress code. Time flexibility. No PPO is offered as they take only one year interns as employee. Academic courses relevant to the project: Cryptography, DBMS, Software Engg., Computer Networks, DSA Name: Mihir Kelekar (2015A7PS0110G)	2018- 19- sem1
IBM India Software Group , Pune	Worked in the Technical Support Team of IBM QRadar - IBM's product in the field of Network Security. Learned a LOT about Linux, Networks, Network Security etc. Tool used (Development tools - H/w, S/w): Linux, VSphere (Virtual Machines) Objectives of the project: To provide remote technical support whenever customers face any issues Major Learning Outcomes: This internship gave me quite a lot of experience regarding releasing and maintaining a product. I got a lot of insight on client expectations and issues due to direct client interactions. Most important of all, I learned about how the job of managing and monitoring Network and Information Security for large organisations is made easier due to products like QRadar in the market. Brief Description of working environment, expectations from the company: Work environment was very flexible and open. I had a really friendly and supportive team who educated me a lot. Everybody was approachable and cleared all my doubts readily. Academic courses relevant to the project: Computer Networks, Network Programming, Internetworking Technology, CP Name: Saransh Agarwal (2015A7PS0155H)	2018- 19- sem1
IBM India Software Group , Pune	My work was to provide support to the QRadar SIEM Solution by IBM. We had to resolve issues customers were facing with their deployments and their doubts. Tool used (Development tools - H/w, S/w): Linux, Objectives of the project: Support for QRadar software Major Learning Outcomes: Linux, Network Security Brief Description of working environment, expectations from the company: The working environment is very friendly and relaxed with a lot of extra activities involved. Academic courses relevant to the project: Network Security, OS	2018- 19- sem1
IBM INDIA Software Labs, Bangalore	Firstly, I familiarised myself with the organisation and its diverse range of products and offerings. I was initially put in the "Watson Explainability" squad during which I got hands on with Watson Studio which is an integrated environment designed to make it easy to develop, train, manage models and deploy Alpowered applications. Moving on I was asked to learn on different tools and frameworks like RESTful APIs, GitHub, IBM Cloud and Apache Spark. With this understanding of tool and getting a hang of data governance space, I was given an assignment to understand ZooKeeper and write a utility that could be used to synchronise resource access across multiple process instances in one of the micro-service of data governance. After doing that, I was assigned the task to look into Apache Kafka clusters and Streams and write various APIs such as Producer, Consumer and Stream. Tool used (Development tools - H/w, S/w): GIT, Gradle, Liberty, Zookeeper, Kafka, Cloudant, IBM Cloud Objectives of the project: Primary objective was to get hands on experience on various tools and frameworks in order to understand how things in the industry work. Apart from that, the work was to create and improve the existing synchronising and locking mechanisms currently available. Major Learning Outcomes: I got to know the working of various frameworks like Spark, GIT, Kafka, ZooKeeper. I had the experience of implementing the theoretical knowledge gained during college. Brief Description of working environment, expectations from the company: IBM is a great place to work in. It provides a great work- life balance. Apart from being a good and friendly environment, IBM ensures over-all development of the employees. Not only did I get to work on diverse domains ranging from AI to Data Governance, my mentor ensured that I was involved in all the activities- be it meeting with the top leadership or team outings. It was a great experience. Academic courses relevant to the project: OOP Name: Devesh Dhole (2015A7PS0102G)	2018- 19- sem1

Company	Experience	Year
IBM INDIA Software Labs, Bangalore	I was involved in majorly 2 tasks using Apache Kafka. First task was to write an event sourcing logic. The current logic used a java based queue which was creating a bottleneck for sourcing these events. I modified the queue to Kafka based which made it much faster. The second task was to create a service which basically pushes and pulls data from Kafka Cluster in various formats. The second task was based on Business Process, Services and adapters. Tool used (Development tools - H/w, S/w): Apache Kafka,Apache Zookeeper,XML,BPML,Xpath,Services,Adapter,Business Process Objectives of the project: 1. Optimizing the event sourcing logic. 2. Developing a Kafka Service. Major Learning Outcomes: Apache Kafka,XML,BPML,Services,Adapters. Details of Papers/patents: "Kafka Integration for event processing in B2B Integrator": https://www.ibm.com/developerworks/community/forums/html/topic?id=9518c4ba6bd0-44d9-873f-ce3dfc78bf37&ps=25 Brief Description of working environment, expectations from the company: The team I was alloted was Development team for B2B Sterling Integrator. The working environment was not very good. The average age of the team was very high so I couldn't socialize with the team much. The learning pace was very slow. Not because I was not willing but because the team members were not enthusiastic. If you do not ask for work you will never get work. Even when you are asking for work they will not be that passionate about the task. But this completely depends on the team. Overall my experience was way below my expectations because I couldn't learn much even when I wanted to. Academic courses relevant to the project: OOP, DBMS Tool used (Development tools - H/w, S/w): Eclipse, git, postman, gradle Objectives of the project: Suggest Automation rules given the data rules. Academic courses relevant to the project: DSA, OOP, DBMS	2018- 19- sem1
IBM Security - Fiberlink , Bangalore	The project we did would fall under product development. It started out with knowledge transfer on Docker, Node.JS, the product architecture and workflow. The task given to us was based on using Ansible Tower APIs to configure/set-up remote machines or cloud. The project was implemented in Node.js and its extensive library. Unit tests were written to ensure the robustness and integrity of the program. Tool used (Development tools - H/w, S/w): Ansible, Ansible Tower, Node.JS, POSTMAN, Docker Objectives of the project: Integration of IBM Cloud Automation Manger and Ansible Tower Major Learning Outcomes: Standard Coding Practices, Refactoring and revision of code, Collaboration using git, Documentation practices, Unit Testing, Globalization Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DSA, OOP	2019- 20- sem1
IBM Security - Fiberlink , Bangalore	Cam ansible integration, portal for testing department in ibm cps for testing purpose Tool used (Development tools - H/w, S/w): Node.js, django, ansible tower, postman, jython Objectives of the project: Cam ansible integration, portal for testing department in ibm cps for testing purpose Major Learning Outcomes: Node.js django automation using ansible optimization of scripts while executive collectively Details of Papers/patents: Brief Description of working environment, expectations from the company: Work life balance and learnt some useful things good supportive environment Academic courses relevant to the project:	2019- 20- sem1
IBM Security - Fiberlink , Bangalore	I was allotted two major projects and two mini projects in the Order Management System squad of IBM along with some learning and valueaddition courses. All of the projects were back-end related. First Projects was designing and implementing a customised quartz scheduler for IBM -OMS Back-end for their internal communication. We had to start the project from scratch and do the testing as well. After it's completion, I was assigned one project in new relic monitoring in which I was asked to convert the metric code to event code and then the detailed abstraction through NRQL. Mini projects were improving the code for onboarding customer in sim_microservices and sorting integers of 1 gb data (only 128 mb ram can be used) Tool used (Development tools - H/w, S/w): Quartz Scheduler, Kong API, Hadoop ,Docker, Kubernetes, New relic tools Objectives of the project: making code more efficient and customer friendly Major Learning Outcomes: Improvement in debugging skills, learning new technologies, softwares etc. Details of Papers/patents: Brief Description of working environment, expectations from the company: The manager was kind and gave projects based on our interests. You will learn about new softwares, technologies here but for the guidance from the senior engineers, you have to take the initiative. Academic courses relevant to the project: DSA, DBMS	2019- 20- sem1

Company	Experience	Year
IBM Security - Fiberlink , Bangalore	For the first month, we were asked to learn how to use tools like Docker, Kubernetes, Protractor and many others relevant to the IBM OMS. We were asked to understand and propose a solution individually for some of the problems associated with IBM OMS. In this process, we were made to learn about the working of Supply Chain Management and how IBM OMS works. I was assigned to the Watson Order Optimiser team, a sub-unit of Order Management System, Bangalore team. My work involved creating frameworks to aid in testing various components of WOO and automating the testing process. The automation process was done using IBM's UrbanCodeDeploy environment. Protractor was used to write tests for WOO components known as Result Explainer and frontend UI. Alongside working on our projects, we were asked to complete certain IBM training courses and obtain certifications for the same. Tool used (Development tools - H/w, S/w): Protractor, NPM, Eclipse, Allure Reporter, Selenium, Company provided laptop(Mac) Objectives of the project: Automate testing of Result Explainer and frontendUI Major Learning Outcomes: Usage of software tools like Protractor, NPM and functioning of Supply Chain Management. Details of Papers/patents: None Brief Description of working environment, expectations from the company: Work environment is great. Flexible work timings but have to get the work done on time. Choice of project was given to us. Team members are really helpful. Academic courses relevant to the project: None Student	2019- 20- sem1
IBM Security - Fiberlink , Pune	The first Aim is to implement Sign in with Apple to apps and Websites.Cloud Identity Connect is an IBM owned identity governance Application written using "Java EE 8".It provides user/ corporations, for their business, with various identity access management functionality, services and several third party services such as linkedin, google, facebook etc are consolidated into this application.Cloud Identity Connect currently serves no functionality for AppleIdentity as prior to the "Sign in with Apple 1.0 framework", Apple ID did not support this feature, but now with the release of this framework it is possible for users to sign into the third party applications with their AppleID.Corporations and Online Services across the world are integrating "Apple Identity" feature onto their respective platforms, so is IBM ElasticSearch is a database that stores, retrieves, and manages document-oriented and semistructured data.Cloudant is an IBM software product, which is primarily delivered as cloud based service.Cloudant is a non relational distributed database service of same name. Second Aim is to check how efficient ElasticSearch is over cloudant like how fast indexing can be done on elasticsearch, how fast querying can be done from elasticsearch as per requirements. Tool used (Development tools - H/w, S/w): Elastisearch, Kibana, postman, gradle Objectives of the project: Efficiency of elastisearch over cloudant, sign in with apple implementation on local flow Major Learning Outcomes: Usage of cradle, softwares like elastisearch, docker, unit testing Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DBMS,OOP Student	2019- 20- sem1
IBM Software Group, Bangalore	I worked with the security squad of IBM private cloud offering, ICP. I was tasked with writing test suites to automate the testing and evaluation of various aspects of ICP related to login, authorisation, authentication. The project requires an in depth understanding of the working of ICP to build robust test cases covering all possible scenarios. I also worked on another project which involved developing a model for the classifications of X.509 certificates into risky and non risky. Since X.509 certificates are used widely to validate identity, it is important that these certificates can be trusted. The aim of this project is to propose a framework to assess the risk associated with these certificates using certain trust criteria and characteristics and classify them into 3 categories: high risk, medium risk and low risk. This project requires a deep understanding of certificate management and machine learning algorithms. Tool used (Development tools - H/w, S/w): Docker, Kubernetes, Helm, Jasmine, Gulp, Java, Weka Objectives of the project: Security Test Automation & Risk Assessment of X.509 Certificates Major Learning Outcomes: Learned a lot about how enterprise level code is written, the production pipeline followed while building a software. I also got to learn a lot about cloud computing, how technologies like Docker and Kubernetes are used and how powerful they can be. Academic courses relevant to the project: Machine Learning, Data Mining, Cloud Computing Name: Puli (2015A7PS0089P)	2018- 19- sem1

Company	Experience	Year
IBM Software Group, Bangalore	I was taken into the team which was working on a whole new project called "AI Open Scale". AI OpenScale allows businesses to operate and automate AI at scale – irrespective of how the AI was built and where it runs. This service provides enterprises visibility into how AI is built, used, and performs thus proving to be a major breakthrough in the field of Machine Learning by serving as the solution for the issues of "explainability, bias detection, and remediation". I was initially assigned the work of verification of some of the features and regression testing to get comfortable with the already existing code and features. The work included testing whether a variety of datasets comprised of varied data types, were biased or unbiased using the data bias calculation service, testing a variety of models such as SVM, Tensorflow, Keras on top of Tensorflow built using frameworks such as Scikit-Learn, using the model the model bias calculation service. Then I was assigned to work on implementing logging across all the functions using a custom logger which had to store additional information apart from logging the errors/warnings. I was assigned the task of improving the service's performance by making use of a local cache. Later, I worked on implementing RESTful API for communication across the sub-services. I extended the functionality of our service to datasets with float, mixed attributes and the calculation of the distribution of continuous data in buckets which was later used for the detection of the source of the bias. Using Docker based on grpc for communication across the sub-services. Tool used (Development tools - H/w, S/w): Pandas for working with CSV files(datasets). Scikit- Learning library for the development of models used for testing. Advanced Rest Client and Postman for the building frust on AI. The objective of the part of the project wishin I was working on was to detect if a model is biased and detect the source of bias. Major Learning Outcomes: This internship has helped me in gaining a lot of k	2018- 19- sem1
IDeaS - A SAS Company	We were given almost 1 month of training on Java based web application development, in which basics were taught through a sample project of a picnic details management application. My first project was a Car parking management application, where I used Spring Boot and JPA in developing the application, along with SQL for database management. Next project I worked on was in the team working on G3, IDeaS' live product. Along with this, I worked on creating automated workflows using Microsoft Flow for the HR team. Tool used (Development tools - H/w, S/w): Java 8, Spring Boot, Hibernate, MySQL, Spring Security, Javascript, CSS, Bootstrap 4, HTML, Maven framework Objectives of the project: Multiple projects, as described in the summary Major Learning Outcomes: Using concepts of OOPS, DSA and DBMS in software development, and working in a team. Agile practices in developing software. Test Driven Development. Brief Description of working environment, expectations from the company: Very friendly people, helpful colleagues, mentors and managers. Lots to learn. Company took us to Goa Academic courses relevant to the project: OOP, DSA, DBMS Name: Vishal Mishra (2014B2A10616P)	2018- 19- sem1
IDeaS - A SAS Company	Developed Alexa Application Tool used (Development tools - H/w, S/w): AWS, Alexa developer portal, maven, core java, jsp, spring framework, mysql, mongodb, Objectives of the project: The project aims at answring general queries of the company's employees Major Learning Outcomes: overall software development product Brief Description of working environment, expectations from the company: working environment is good, everyone is very helpful but you have to be responsible and be motivated about the work given to you Academic courses relevant to the project: Object oriented programming, java Name: Vishal Mishra	2018- 19- sem1
IDeaS - A SAS Company	I worked on Alexa application which aims at solving general queries for employees of the company Tool used (Development tools - H/w, S/w): AWS maven java Eclipse spring mongodb sql jsp servelets Major Learning Outcomes: Overall web application development Brief Description of working environment, expectations from the company: Working environment is good mentors are helpful and you get work on cool stuff Academic courses relevant to the project: Oop and general coding Development	2018- 19- sem1

Company	Experience	Year
IDeaS - SAS - Analytics, Pune	In HR data analysis project I have worked on different stages of recruitment processes so that we can control whole recruitment process by finding the probability of different stages. In Cognitive Analysis project we are controlling the interview process by preparing questionnaire and analyzing that test data with different analytical tools. In my last project I have worked on descriptive analysis of ROA/Care Department by controlling a large amount of data. Tools used (Development tools - H/w, S/w): SAS Objectives of the project: For project 1-4, the main aim was to control the whole recruitment process. For project 5, the main aim was to get the descriptive analysis of their client cases related to company products namely G2 and G3. Outcomes of the project: Able to control whole recruitment process (including Interview process with the help of cognitive analysis) with the help of historical data and SAS tool. Major Learning Outcomes: SAS (Basic Level), Machine Learning (Regression). Details of papers/patents: One Case study related to Logistic Regression Project is accepted by PS Instructor to use in data mining course. Brief Description of working environment, expectations from the company: The company was good in all aspects. Academic courses relevant to the project: Data Mining, Machine Learning (only Regression not neural network), Statistical Inference and Applications, Probability and Statistics.	2017- 18- sem1
IDeaS - SAS - Analytics, Pune	I am currently working on reducing the manual work in recruiting a new candidate for company in any department using Natural Language Processing. Using POS Tagging and various APIs related to that, we extracted various informations from candidate's resume Tools used (Development tools - H/w, S/w): Spring mvc, Selenium, jUnit, Rest, JPA Objectives of the project: Automating the process of Recruitment. Outcomes of the project: Successfully deployed on production side Major Learning Outcomes: End-to-end Web development, Natural Language Processing, Test driven development. Brief Description of working environment, expectations from the company: Colleagues are really helpful, open door environment, everyone is approachable, Full training before start of project, Mentor assigned to help with the project, treatment like an employee, flexible timings Academic courses relevant to the project: Information retrieval, OOPS, DBMS Student	2017- 18- sem1
IDeaS - SAS - Software Development , Pune	The work involved automation of video upload process. This was achieved by utilising Javascript, Bootstrap, REST Api and Spring JDBC and MySql to create a CRUD based system that takes input from user for the video links uploaded on secure cloud storage, store the links into database and modify them and later integrate them automatically into website as per their year, quarter and location Tool used (Development tools - H/w, S/w): Eclipse, Tomcat Objectives of the project: Automation of video upload process for company's webapp Major Learning Outcomes: REST Api, MySql, Spring JDBC, Javascript, Bootstrap Details of Papers/patents: Brief Description of working environment, expectations from the company: There was a work/life balance for interns. Mentors and infact employees of company's are supportive. The project in itself are a great learning curve for beginners or people not from CS background but wont be much of a challenge for CS people. Academic courses relevant to the project: OOPS, APIs	2019- 20- sem1
IDeaS - SAS - Software Development , Pune	I was given the task of integration of Google Analytics with the web application of one of the products of the company. This would help the developers and the support team in understanding the client behavior. I also worked on development of Auditing Mechanism for the application which will track the modifications done by the user to the data stored in the database. Tool used (Development tools - H/w, S/w): Ember JS, SQL Objectives of the project: Integration Of Google Analytics with a Web Application and Auditing Major Learning Outcomes: Learnt About: Ember JS, SQL, Java Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment of the organization is extremely pleasant. The organisation is extremely helpful in assisting it's interns to learn new technologies and concepts. Academic courses relevant to the project: CS F111: COMPUTER PROGRAMMING Student	2019- 20- sem1

Company	Experience	Year
IDeaS - SAS - Software Development, Pune	My work at IDeaS is mainly designing an online responsive web application for employee engagement survey which is currently conducted in excel sheet. So, I am designing application In which employee can rate and rank the feedback aspects and can view the reports in bar diagram And Pie chart. Main objective of application is to make the survey available all the time and report the required data in pictorial format. This Application makes the survey easy to conduct and saves a lot of time for the managers and Employees. Tools used (Development tools - H/w, S/w): 1.Front-end: HTML, CSS, JS, JQuery, Twitter™s bootstrap. MDBootstrap, etc. Objectives of the project: continuous feedback survey Outcomes of the project: continuous feedback survey Major Learning Outcomes: The first thing I learnt is writing efficient and readable code on production level is an art in which I started developing interest. It also taught me to understand the complete flow of application which makes a good programmer. Effective Googling is also a must needed skill for a programmer. Finally I got to learn technical frameworks like spring boot and JPA and spring security and other protocols like LDAP and filters like Waffle. As the company strictly practices agile methodology, now I know the value of Test Driven Development and daily scrums and weekly catch ups. Brief Description of working environment, expectations from the company: agile methodology is followed. Safe environment. Academic courses relevant to the project: oops, DBMS Faculty Comments: Expectations from industry: Major work related to Analytics. Students are expected to learn about various concepts and tools related to data analytics. Knowledge of Java,CSS is helpful for some projects Student	2017- 18- sem1
IDeaS - SAS, Pune	As a hotel revenue management company, IDeaS uses a variety of forecasting and data analysis modules for prediction. I worked on Function Space Revenue Management during my PS2. As a part of my project, I tested the accuracy and evaluated the performance of many of these modules. I wrote test programs in SAS to test the modules and benchmark the output with the production code. I also provided feedback about the module documentation. I fixed various defects in the currently existing modules which were then incorporated into the production code. Tools used (Development tools - H/w, S/w): SAS Objectives of the project: Testing analytical software related to function space revenue management research Outcomes of the project: I tested multiple modules and completed their documentation Major Learning Outcomes: I learned the terminology and (a part of) the process used for revenue optimization. I learnt SAS and logical thinking. Brief Description of working environment, expectations from the company: The Company DOES NOT has paid leave. I had very good mentors at my PS. They were very helpful and supported me throughout the PS. I obtained the SAS base programmer certification for free during my PS. Since IDeaS is owned by SAS, I had free access to the official SAS documentation and courses. I would suggest this to people who are interested in data analysis.	2016- 17- sem1
IDeaS - SAS, Pune	Project was a web application Tools used (Development tools - H/w, S/w): Eclipse, mysql, java, javascript, J2EE Objectives of the project: To develop a web application to support daily banking tasks. Outcomes of the project: A full-fledged web application that can do tasks similar to banking system. Major Learning Outcomes: Knowledge of Java Enterprise. Brief Description of working environment, expectations from the company: Company expects student to already know a lot and prefer students which have some past experience.	2016- 17- sem1
IDeaS - SAS, Pune	Some database operations were done in the initial stages. Some automation was made to integrate third party applications with the existing clients and provide proper subscriptions to the clients. These applications were different property systems (eg. Agilysys, Springer Miller) and they were integrated with the existing clients and all their files were stored on some server dedicated to the third party applications. Some scripting was also done for modifying and updating the server files. Tools used (Development tools - H/w, S/w): Jenkins tools, MSSQL server management studio, Windows Powershell, SQLyog Objectives of the project: Automation of configuration management tools for G2 integration Outcomes of the project: Automation were created for integrating third party applications for existing subscribers and updating the server files. Major Learning Outcomes: Learned Powershell, Jenkins tools Brief Description of working environment, expectations from the company: There is not a lot of work and the working environment is not good. Most of the managers are sadist and have a lot of ego. There is a lot of difference in their treatment of freshers and interns. The HR department people do not help at all. The team members also are not helpful. One of the worst working environments. Most of the employees are Marathi-speaking. So unless you know Marathi, you will have problem communicating with the people there. AVOID THIS COMPANY. DO NOT COME TO IDEAS.	2016- 17- sem1

Company	Experience	Year
IDeaS - SAS, Pune	I have worked with the Quality Assurance department for majority of the time in my PS. My major work was to write unit test cases in JAVA and other automation techniques. Tools used (Development tools - H/w, S/w): Eclipse, Apache Tomcat Objectives of the project: Writing unit test cases for the code which has already been developed Outcomes of the project: Helped the QA team with automation and testing Major Learning Outcomes: Immense knowledge gained in Software Development and JAVA programming language Brief Description of working environment, expectations from the company: The working environment was pretty good. Most of the employees are willing to help when in need. However, the company employees lack professionalism. Some of them are quite rude in their approach towards the interns. Also, employees didn't seem motivated to work for the company. Faculty Comments: Expectations from industry: Expectations from the industry - They expect students to possess good knowledge of basics, OOAD, web development, SQL/NoSQL databases, analytics, and testing. During internship students need to work with the preferred frameworks, libraries suggested by their groups. Some of the concerns heard from mentors include non-compliance to coding standards, need for better documentation, and ownership of tasks. Student	2016- 17- sem1
IFB Industries , Goa	I was a part of the IoT implementation team at IFB Industries. The plant manufactures washing machines. My project concerned the development of a real time, automated and centralised data monitoring and processing setup for the washing machine drum production line. The purpose of the project was to gather production and operator data continuously and store for further analysis on a dashboard. The project was envisaged to be an important step for in-house Industry 4.0 implementation. I was responsible for developing an automatic data logging configuration on a Mitsubishi PLC using ladder programming. I also developed a python script for a backend cron job to import data from the PLC and process it to give out the KPIs of the drum production line and store the data on MySQL database. My contribution to the project consisted of two stages-prototype stage where the proof of concept was demonstrated and then the actual deployment stage. Tool used (Development tools - H/w, S/w): Hardware: Mitsubishi Q-series PLC, proximity sensors and other electrical components Software: Mitsubishi PLC software tools for ladder programming and data logging (GX Works and Data Logging Configuration Tool), Jupyter Notebook for Python scripting, MyS Objectives of the project: To develop a real time, automated and centralised data monitoring and processing setup for the washing machine drum production line Major Learning Outcomes: 1. PLC programming and working of PLCs and other electrical components 2. Basic Python scripting especially use of Pandas library in handling data Details of Papers/patents: none Brief Description of working environment, expectations from the company: The working environment is one of the best I have experienced. My mentors and other seniors at IFB are extremely receptive and supportive of interns' ideas and their work. Academic courses relevant to the project: Mechatronics and Automation, Computer Programming	2019- 20- sem1
IFB Industries , Goa	Built an Augmented Reality App for IFB. The Augmented Reality App was created so that users could browse all the products and select any product to view it in 3D downloaded from cloud. Users could move, rotate & scale the 3D model and also see the Dimension in 3D. 3D & 2D features were also implemented. Users could also buy the product within the app using dynamic prices. Tool used (Development tools - H/w, S/w): Unity, 8th Wall, C# Objectives of the project: Build an Augmented Reality App for IFB Major Learning Outcomes: Full Stack App Development, Android App Development, iOS App Development, Game Development Details of Papers/patents: Brief Description of working environment, expectations from the company We were offered autonomous control over the progress of our projects and were offered the required resources needed to complete the same. Total control meant we could learn the in & out of processes involved in development of full life cycle of product. We were given enough opportunities to get involved in other projects of our interests too. All in all, we learnt what it takes to build a product from scratch to completion. Academic courses relevant to the project: Data Structures & Algorithms, C++, Object Oriented Programming	2019- 20- sem1

Company	Experience	Year
IFB Industries , Goa	The project allotted to me was "Runout Testing Automation and Data Acquisition System". In the project i had to design a system which would automatically collect data from the part and store it in an online server from where the data can be retrieved as and when needed. The work was broken down into 3 parts. The first one was the design of the fixture using which the data collection points will be detected. The fixture components of the shaft holder, the positioner and the clamps were designed strategically so that the data from the part can be easily acquired. Also the design was made in such a way that there is an ease for placement and removal of the part. The second part of the project was to design the data collection system. For this the sensors were selected that would be helpful for the data collection process. Also the PLC was selected and the coding was done for the control of the system. the third part was the data storage. The components and the coding for the database and the online cloud based FTP server was done which would store the data and would allow the company to access it when needed Tool used (Development tools - H/w, S/w): Fusion 360, GT Designer3, MySQL Objectives of the project: The objective of the project is to develop an automation system which employs 100% testing of the parts and stores the data which can be analysed in the future Major Learning Outcomes: Fixture Design, PLC Programming, SQL Database formation, FTP Server Setup Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment in the company is very professional and work focused. everyone in the company is always accessible for help and are ready to help with your problems. Almost all the necessary resources were provided by the company for my project and any other needed was tried to be met if possible. The mentors took reviews regularly to make sure we were on the right track and provided much needed guidance regarding the problems from their real world wo	2019- 20- sem1
IFB Industries , Goa	Mine was a group project, we worked on the transportation bolts of a washing machine. We collected the same component used by different companies across their variable models and studies their effectiveness in their job. Then made a 3D model for IFB machine and then fabricated the component and tested it. Tool used (Development tools - H/w, S/w): Solid works, 3D printer, Lathe and drill machines, hacksaw and file, shipping tests equipment. Objectives of the project: The transportation bolts used in the IFB washing machines is same for 6 and 8kg machines and the load in 8kg machines is too much for them to bear and the damaged during testing, incurring a huge loss to the company. Major Learning Outcomes: We learnt about the components and working of washing machines, the quality tests done to ensure the same and the way the development of a particular component works in the R&D. Details of Papers/patents: - Brief Description of working environment, expectations from the company: The employees are supportive and friendly. Academic courses relevant to the project: CAD, Mechanics of Solids, Mechanical design and drawing, Production Techniques.	2019- 20- sem1
IFB Industries , Goa	Studied the basics of machine learning. Used this concept to train a model on collected data to predict the variables required using python. Tool used (Development tools - H/w, S/w): Machine Learning, Jupyter notebook, Python Objectives of the project: Predicting the optimal drying time of a washer dryer machine using machine learning Major Learning Outcomes: Machine learning basics, Python basics, Data study Details of Papers/patents: Brief Description of working environment, expectations from the company: Helpful mentors and colleagues. Efficient working expected Academic courses relevant to the project:	2019- 20- sem1
IFB Industries , Goa	Established a Data acquisition system for production lines using PLCs and developed a web based dashboard with screen friendly aperture for various devices and connected them over a single IoT network making a one stop data station. Tool used (Development tools - H/w, S/w): PLCs, Django, Xampp Objectives of the project: To fullfill the data gathering step in IIoT Major Learning Outcomes: Industrial Automation, Full stack development Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Mechatronics, OOP	2019- 20- sem1

Company	Experience	Year
IFB Industries , Goa	Quality analysis of inlet filter of magnetic feed valve of both Top Loader and Front Loader Wahing Machine. Collecting the data regarding the component failure happenning in different parts of the washing machine to analyze the failure rate of the inlet magnetic valve. Variation in failure as per the geographic locations. Analysis of water quality and product life cycle. Analysis of the different filter geometries to improve the quality. Geometry analysis was done by Modelling CFD-DEM Coupled analysis on the different filter geometries present. A vitrual environment where dirt particles are passed along the water in the fluid domain of the filter using simulation in Star CCM+. Particle count is the main parameter to find the clogging rate of the filter geometry. Finally improving the overall quality by modelling a new prototype of the filter geometrywhich will have an extended life cycle. Tool used (Development tools - H/w, S/w): Autodesk Fusion 360, Autodesk Inventor, Star CCM+, MS Excel. Objectives of the project: Quality improvement of the current filter geometry. Major Learning Outcomes: Learning Discrete Element Method(DEM), CFD-DEM couple flow, data analysis using excel, pareto analysis, professionalism, working in a team. Details of Papers/patents: Brief Description of working environment, expectations from the company: IFB has a vibrant atmosphere to work in. People are always eager to help out in any problems that I faced. A positive environment which brings the best out of an employee. Academic courses relevant to the project: product Design, CFD Student	2019- 20- sem1
IMI Mobile Data Analytics, Hyderabad	Created multiple web pages for the product,poc of screenshare using browser.Major work involved frontend development so learnt JAVASCRIPT,AngularJS,Jquery,HTML,CSS,Gulp,Chrome-internals,Node.js,Bootstrap,Semantic UI. Tools used (Development tools - H/w, S/w):  JAVASCRIPT,AngularJS,Jquery,HTML,CSS,Gulp,Chromeinternals,Node.js,Bootstrap,Semantic UI Objectives of the project: Real-time communication using Webrtc Outcomes of the project: Creating the product website Major Learning Outcomes: JAVASCRIPT,AngularJS,Jquery,HTML,CSS,Gulp,Chrome-internals,Node.js,Bootstrap,Semantic UI Brief Description of working environment, expectations from the company: The project is one part of research and development efforts done by the company,it hopes to create and increase in sales of the product as a standalone project and and also increase the capability of the existing products. The project can be great boon for providing a lot of insight in computer networks and AI features. Academic courses relevant to the project: Digital Image processing,Data structures and algorithms.	2017- 18- sem1
IMI Mobile Data Analytics, Hyderabad	I worked on software development on Android, Fullstack Web Development, and prototypes, for the company's IMIchat service platform. Worked on the Android SDK for the platform, played a part in product management decisions, and implemented proof-ofconcept designs with IBM Watson, Android features, and web portals. Tools used (Development tools - H/w, S/w): Android, Java, Python, Flask, SQLAlchemy ORM, MSSQL, HTML, CSS, Javascript/JQuery. Objectives of the project: To work on adding features and progressing development of the company's service platform and offerings Outcomes of the project: Was able to provide completed solutions to points of interest on the company's roadmap, and provide input in various sprint cycles for software dev as well as product management. Major Learning Outcomes: I spread my time into multiple technologies and got the opportunity to be familiar with all of them in an industry level setting, touching a large variety of topics in a typical software engineer's role. Brief Description of working environment, expectations from the company: IMIMobile is medium sized company, with reasonable expectations. My team (IMIchat product management/software development) is very relaxed and provides a great environment to work on skills you want to improve, no fuss, no strict deadlines, friendly mentors, relaxed expectations of work timings. Academic courses relevant to the project: Computer Programming, Object Oriented Programming, DBMS. Faculty Comments: Expectations from industry: Students completed variety of internship projects in the area of retail and supply chain management software development and testing. Software included Java Script, Java, and C/C++. Domain involved web software development. Student	2017- 18- sem1
IMI Mobile R&D , Hyderabad	Back-end development of new Natural Language Processing Nodes (Intent and Entity) and experimenting with methods to auto select algorithms based on data Tool used (Development tools - H/w, S/w):  Java,Python,Snorkel,Flask Objectives of the project: 1. Building of new NLP nodes for intent and entity recognition 2. Create an heuristic for Auto selection of Algorithm for Intent Node 2. Major Learning Outcomes: 1.software engineering process 2.Machine Learning and Meta learning 3.Synthetic data generation using snorkel 4. API using flask Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Software engineering, DSA, Machine Learning, OOP Student	2019- 20- sem1

Company	Experience	Year
IMI Mobile, Hyderabad	I had to collect data from various websites by scraping. I have researched cloud platforms like AWS and Docker. Tools used (Development tools - H/w, S/w): Python,AWS, Docker Objectives of the project: Research on Cloud platforms and their services. I had to identify appropriate services which can be used by organization. Also I had to collect and query data from various sources to train algorithms. Outcomes of the project: I have researched about various cloud platforms and conducted a case study on autoscaling of applications Major Learning Outcomes: Learnt SQl, Python, Containers (Hot topic in the field of virtualization) Brief Description of working environment, expectations from the company: My team expected me to have strong coding skills. Working environment is good.	2016- 17- sem1
IMI Mobile, Hyderabad	Website building Product management Tools used (Development tools - H/w, S/w): Python, CSS, HTML, UXPIN Objectives of the project: Website building Outcomes of the project: Website Major Learning Outcomes: Python Brief Description of working environment, expectations from the company: I've worked in two departments. The working environment of product team was very friendly compared to analytics.	2016- 17- sem1
IMI Mobile, Hyderabad	Got to know about chatbots and how are they prevailing in the market. Market research on chatbots, chatbot building platforms. Hunting contacts of working professionals from various companies using the resources available. Objectives of the project: Different usecases for chatbots existing in the market, exploring various bot builders, Finding out contacts for launching campaigns Outcomes of the project: Feedback on the bot builders, existence of various usecases in different sectors, Campaigns launched to the contacts found. Major Learning Outcomes: Finding out what is necessary before launching a product which is similar to the ones existing in the market. Brief Description of working environment, expectations from the company: Working environment is quite good.People around here are very cool. Managers,team members help you with any doubts. One can be given an option to shift his/her work if he/she is not very good at it and want to learn some other thing.	2016- 17- sem1
IMI Mobile, Hyderabad	After completion of this internship or more precisely this PSII course at IMImobile, these five months have been a wonderful learning experience. Working with team on live projects has helped me grow as a person. I have learned many industry specific tools, software and computer languages which are currently an advantage to know. They include but are not limited to SQL, Python, MS Excel, basic Tableau and Anaconda (IPython), HTML, CSS, jQuery, d3.js. Followed the best practices while writing a code, writing descriptive variables, commenting on code, making the scripts readable and of the standards which currently the industry follows. I used many packages in python which are very useful in the current data science environment such as pandas for managing .csv files, BeautifulSoup for parsing, and urllib & urllib2 for crawling into webpages. I have learned about data art and learnt about the various tools to visualize data that can be used to draw important and valuable insights from the available data and be presented to the various stake holders, who can use these insights for their advantage. Tools used (Development tools - H/w, S/w): SQL Server, Tableau, Python, HTML, CSS, JavaScript, d3.js Objectives of the project: Reorganization and Cleansing of database, Data Visualization Outcomes of the project: Cleaned Database, which can now be queried using filters through a UI, even by a layman with no SQL programming experience. Automated the process of custom data visualization, by writing back-end codes to prepare the data from raw data through python codes, and supplying the data to the front end codes to visualize the data Major Learning Outcomes: Gained knowledge on RDBMS, python data science modules, data visualization using JavaScript library D3. Brief Description of working environment, expectations from the company: Engaging working environment, where you are supposed to figure out things by yourself, but are also helped out at every stage by immediate manager. The management is accessible even for interns	2016- 17- sem1
IMI Mobile, Hyderabad	Managed enterprise campaigns, data analytics using SQL, Python Tools used (Development tools - H/w, S/w): S/w - MS-SQL, Excel Objectives of the project: Manage enterprise campaigns Outcomes of the project: Made summary of various campaigns and helped in their better management Major Learning Outcomes: Using analytics tools, such as MS-SQL, Python, Excel Brief Description of working environment, expectations from the company: Friendly people, team helps in getting the best out of you.	2016- 17- sem1
IMI Mobile, Hyderabad	Digital Marketing activities. Business writing: writing case studies about IMI's solutions for different industries, website content for IMI India website and multiple campaigns, brochures for offline events and conferences. R&D: Market research about existing chatbot use cases and chatbot development platforms. Analytics: Predictive analysis for a campaign. Tools used (Development tools - H/w, S/w): MS Office, SQLite, Tableau, MailChimp, IMIcampaign, IMIchat. Objectives of the project: Improving lead generation, presentation about chatbots. Outcomes of the project: Objectives fulfilled. Major Learning Outcomes: Corporate culture, analytics tools, digital marketing activities. Brief Description of working environment, expectations from the company: Good stuff. Student	2016- 17- sem1

Company	Experience	Year
IMIdigital R&D , Hyderabad	GUI DESIGN & BACKEND INTEGRATION GUI design includes planning and designing the architecture of the components in the application developed. Backend integration involves making the data transmission in application using the required protocol and synchronizing them perfectly with GUI. Tool used (Development tools - H/w, S/w): NETBEANS,WIRESHARK Objectives of the project: The developed Application is IMS/RCS client with supporting SMS, CHAT and File-Sharing using SIP and MSRP protocol and audio and video using RTP. Major Learning Outcomes: Learnt many protocols like sip,msrp and Rtp Details of Papers/patents: Not known Brief Description of working environment, expectations from the company: The work environment is very friendly. Mentor and Manager are very supportive. The assigned Components should be completed on time. Academic courses relevant to the project: Computer networks, Object oriented program Student	2019- 20- sem1
IMImobile, Connect Product	Using IMIconnect platform to facilitate IMIchat agent communication with an android application. Tool used (Development tools - H/w, S/w): IMIconnect platfrom, IMIchat platform, Postman. Objectives of the project: Proof of Concept Name: Angad Lamba (2014B3A70689P)	2018- 19- sem1
IMImobile, Connect Product	Digital Humans: Idea is to build a video version of chatbot that customer can interact with and is more engaging. This will give chatbot a personality and the ability to show emotions at a visual level. This will be made in unity and requires making complex graph of animations with transitions. Tool used (Development tools - H/w, S/w): Unity, Blender, Oculus Rift, Oculus Go, IMIbot.api Objectives of the project: Digital Humans: Idea is to build a video version of chatbot that customer can interact with and is more engaging. This will give chatbot a personality and the ability to show emotions at a visual level. This will be made in unity and requires making complex graph of animations with transitions. Major Learning Outcomes: I learned Unity, C#, as well as learned in great depth about Virtual Reality and how make applications in different VR devices like Oculus Rift. I learned about State Machines and Animations and product development. Brief Description of working environment, expectations from the company: Working Environment is very good. People are nice and helping. Office timings are very flexible. Academic courses relevant to the project: College doesn't offer any courses related to this project.	2018- 19- sem1
Indian Institute of Petroleum , Dehradun	Exploratory work on the interaction of microwaves with sparks from a spark plug. Various experimental setups were put up in place in a logical manner, so as to observe and study multiple-point plasma generation by the above mentioned interaction. Many of these setups needed custom hardware, which were designed by me and fabricated under my direct supervision as well. Tool used (Development tools - H/w, S/w): Ignition Coil, Spark Plug, Microwave, Driller, Shearing Machine, Hand Cutter, Grinder, Soldering Machine, DC Power Supply. Objectives of the project: To observe and study the generation of multiple-point plasma. Major Learning Outcomes: 1.) Direct exposure of spark to microwaves won't produce plasma. 2.) There was some corona discharge related problems in one of the setups, the solution to which I devised, and it worked. 3.) Designing and fabrication of different hardware needed for sett Details of Papers/patents: None. Brief Description of working environment, expectations from the company: Very Supportive staff over all, be it the Project Assistants to Senior Scientists. Academic courses relevant to the project: Production Techniques-I, Production Techniques-II, IC Engines, Mechanics Oscillations and Waves, Thermodynamics, Electrical Sciences. Student	2019- 20- sem1
Infinera	Characterization and tuning of high speed data path - SERDES interfaces for various OTN/GbE protocols on MXP400. The objective was achieved using analog and digital equalizers like CTLE, DFE, FDFE etc., based on channel impulse response and eye distribution for various PRBS patterns up to PRBS31. The Transmit FIR settings on ClariPhy links were optimized for better performance. Project involved automating the data capture of various performance/characterizing metrics using scripts based on Python. Tool used (Development tools - H/w, S/w): Python, JMP, Diag Objectives of the project: Channel Characterization and tuning of High Speed SerDes Links on the MUXPONDER 400 Major Learning Outcomes: Coding Brief Description of working environment, expectations from the company: Work environment is nice. Timings are flexible. Academic courses relevant to the project: Communication System Name: Nikita Mandapati (2015AAPS0251H)	2018- 19- sem1

Company	Experience	Year
Infinera	Developed Python scripts to automate the tuning of serializer-deserializer blocks on Infinera's Muxponder400. The performance of the product was analyzed and optimum parameters were deduced to get minimal errors for high speed PRBS traffic. Tool used (Development tools - H/w, S/w): Python Objectives of the project: Channel characterization and tuning of high speed SerDes links Major Learning Outcomes: Importance of equalization and signal processing for error free communication at high speeds Brief Description of working environment, expectations from the company: The work environment was highly conducive and the seniors and mentor were very supportive in making us comfortable with the project. Academic courses relevant to the project: Communication Systems Name: Shelly Kothari (2015A3PS0246G) Tool used (Development tools - H/w, S/w): Hardware - Quartus, DVE, VCS Objectives of the project: Cost effective solution of 100gig tester Major Learning Outcomes: Learned about FPGAs, tools etc Academic courses relevant to the project: Digital design Student Name: Gaurav Sharma	2018 19- sem1
Infinera , Bangalore	The main project of mine was based around verification of the IP's. First the verification was based on System Verilog so that all the concept are refreshed and than we adopted the UVM, the industrial standard. I was also given a formal training under the instructor regarding this. I also worked on few side project like writing a perl script for verification of port connectivity and a python script for automation of workq Tool used (Development tools - H/w, S/w): System Verilog, UVM, perl, python Objectives of the project: Verification of a dual port memory Major Learning Outcomes: The whole flow of making of any chip, the guidelines and the approach towards verification of any module or IP. Details of Papers/patents: Brief Description of working environment, expectations from the company: Great working environment and the most of the team is made up of Bitsian's only. You will be constantly mentored and everyone involved would be pretty approachable. Flexible working hours as long as you are meeting the deadline of the project. You can learn pretty much everything there regarding the whole flow of creation of any chip Academic courses relevant to the project: Advd, Comp Arch. DD Student	2019- 20- sem1
Inmobi	I was working with the Remarketing team of InMobi. My work mainly revolves around setting up campaigns for advertisers on different DSPs (Demand Side Platforms). Post that, monitoring the campaign, how much each advertiser is spending, are we meeting the demands or not, how much revenue or profit we are making by running those campaigns, if we are incurring loss then how to optimize those campaigns by targeting better users - these were the parts of my job. For analysis purpose, we use Microsoft Excel. For different teams, the jobs types and experience is different. Tool used (Development tools - H/w, S/w):  Microsoft Excel, Different Advertising DSPs (Demand Side Platforms) Objectives of the project: To drive revenue for Inmobi by targeting dormant app users as per client's needs. Major Learning Outcomes:  Learned about how an industry function in general. Learned about how an Advertising industry function in particular. Learned how to use Microsoft Excel at an advanced level and to use Advertising DSPs. Brief Description of working environment, expectations from the company: Working environment at Inmobi is awesome. The people are really good and helpful here. The food is awesome - breakfast, lunch, snacks and dinner is served in a day. Apart from that, there is a breakout area at every floor where you can get coffee, tea etc. along with some lite snacks. There is a dedicated play area (Also there's a PS4 there). There is a lot more than this. A worth PS-II experience here. Academic courses relevant to the project: No academic courses required as such. You will learn everything here. Name: Shreshtha Dhankar (2015A1PS0706P)	2018- 19- sem1
Inmobi	Following were my responsibilities as a Product Management intern under the Marketing Cloud of InMobi :1. User research and market analysis to form GTM strategies for ConnectX 2. Data cleanup and preprocessing using MS Excel 3. 0-1 coordination for campaign execution 4. Coordinating with various teams across InMobi 5. Tracking the business performance and KPIs 6. Outbound sales leads generation for ConnectX and devising prospective mailing campaign Tool used (Development tools - H/w, S/w): MS Excel, MS Word Objectives of the project: Enhancing Operational Efficiency Major Learning Outcomes: 1.First hand experience of working with Product Managers and Product Marketing team 2. Go to Market Strategies and product road-mapping 3. Global understanding of how Marketing Research business works 4. Understanding of competitive landscape and gamut Academic courses relevant to the project: Principle of Management Name: A Anantharaman (2014B5A40565P)	2018 19- sem1
Inmobi	Excel Work, Tracker Monitoring, Ad tech and marketing Tool used (Development tools - H/w, S/w): Excel, Google Sheets, IAP Objectives of the project: To learn about Advertising Cloud and Marketing Major Learning Outcomes: How the ad tech and corporate worlds work Academic courses relevant to the project: PAVA, SCM, PPC Name: Anchit Ahuja (2014B3A40581G)	2018- 19- sem1

Company	Experience	Year
Inmobi	Worked in Sales team for the first three months. Work included onboarding clients on Inmobi's platform, raising invoices/billables etc. client management basically. Then shifted to delivery team where I managed accounts of various clients to ensure their objectives are met. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: Business Development Major Learning Outcomes: MS Excel skills, Presentation skills, Management skills including time management, how to set priorities, negotiation & sales skills. Brief Description of working environment, expectations from the company: Very chilled out working environment. No strict work timings. You can work at your own pace. Take frequent breaks/ leaves etc. No one questions. Name: Aditi Maheshwari (2015A7PS0086G)	2018- 19- sem1
Inmobi	I have worked with Wadogo Demand where I integrated several new advertisers on our platform and WadogoX where I incorporated various new features for improving the UX of the product and also increase its scalability. Tool used (Development tools - H/w, S/w): Languages - Java, Nodejs. Framework - Spring boot Objectives of the project: Wadogo Engineering, is an integral part of Mobile Advertising domain, the base functionality of InMobi. The team is assigned with some regular prime jobs and on-demand development & upgradation related jobs. Among the team's prime jobs API Integration (includes JAVA, JSON), Dockerizing & Scheduling Cron Jobs (includes Dockerization and JAVA), Development of Dashboards (includes front-end & Backend Web Development). The Utilities are reducing human involvement and revenue increment. Major Learning Outcomes: I have briefly learnt and worked on the following: Advanced Java API calls - POST, GET requests Psql queries (insert, update, delete, joins, etc), DB Connections Methods, packages, maven dependencies, loggers Different layers - Service, Dao, connection, IAP API's, Hikari, Redis, Jedis, RSA-256 encryption NodeJS and Javascript Jumpbox, machine and dockerizations and deployment of code in production. Spring Framework Brief Description of working environment, expectations from the company: Work culture and environment was great. Got no complains. Academic courses relevant to the project: OOP Name: Jayendra Agrawal (2015A5PS0933P)	2018- 19- sem1
Inmobi	All interns were registered into different teams so everyone gets a little different work. Most of my work involved statistical analysis of daily transactions to find patterns to maximise the revenue and minimise the cost, ie. to polish the supply demand pipeline. Along with this a lot of analytical work also involves the feedback for new updates and rollouts that keep happening which must be seamlessly integrated with supply and demand partners to ensure continuous smooth functioning of the company. Tool used (Development tools - H/w, S/w): In-house tools, excel, access, PostgreSQL Objectives of the project: Seamlessly integrate new rollouts and identify patterns in supply-demand landscape Major Learning Outcomes: Data Management, extraction, processing, mining and Analaytics Brief Description of working environment, expectations from the company: Great working environment, flexible working hours and incredibly helpful colleagues. Academic courses relevant to the project: Supply Chain Management Name: Kreeti Jha (2014B2A10888P) Tool used (Development tools - H/w, S/w): MS Excel, MS PowerPoint and Inbuilt company tools Objectives of the project: Reduce fraud installs using MTTI analysis and supply analysis Major Learning Outcomes: Digital campaign optimization Name: Navaneethakrishnan Unnikrishnan (2015A4PS0269P)	2018- 19- sem1
Inmobi	I worked in the Central Market Intelligence team - an in-house consulting team that caters to specific business issues of various teams within the organisation that have different functions in the ad tech ecosystem. Tool used (Development tools - H/w, S/w): Softwrae used: MS Excel, MS Powerpoint as well as third-party data tool such as AppAnnie, PrioriData and Mobbo. Objectives of the project: The project could range from an industry study for teams entering a new market/ new venture, or it could be a competitior analysis in a particular field for a team that is already established. We could suggest the course of action based on the market situation. Major Learning Outcomes: I have learnt to deal with huge amounts of data, by analysing them and then making them into concise readable forms. Market research reports demand one to have a coherent flow in thought, and this flow translates in everyday thinking too. Moreover, this internship presented me with opportunities to work with some of the top managers of the India office, and this has vastly improved my confidence in effective communication. Brief Description of working environment, expectations from the company: The work culture breaks all conventional notions one has about the typical corporate workplace. My mentor, my manager and my teammates were extremely supportive for all projects. Its a great learning opportunity, considering that adtech as an industry is still in a nascent phase in our country. Academic courses relevant to the project: Market Research (though this course focuses more on primary research, the work I did involved more of secondary research). Name: Dheeraj Gupta (2015A4PS0367P)	2018- 19- sem1

Experience Year Company As part of the India Sales team at InMobi, I was the direct line of communication between the clients and the product & delivery teams. I handled the operational work for the campaigns that contributed approx. INR 10 crores revenue in 6 months by end to end client servicing and coordinating with delivery team for campaign optimization. I streamlined the sales process to by creating a Brand tracker which was one stop solution for all the information needed for booked numbers. To maintain relationship with old clients and hunt new clients, I conceptualized the campaign solutions for the clients by producing supporting decks. Tool used (Development tools - H/w, S/w): MS Excel, MS Powerpoint, Salesforce, InMobi internal tools Objectives of the project: There was no project as such. I did the same work as done by assistant sales manager. Major Learning Outcomes: Professional know-how, Time Management, Sales Brief Description of 2018-Inmobi working environment, expectations from the company: Employees are pretty chilled out and you will be 19never forced to work. There is no restriction on in and out timing but it varies between different teams. If sem1 you are looking for more client facing or consulting role then InMobi is not the right place for you. Teams are allotted randomly and it only depends on your luck whether you will get a team with good work. There are teams where you just have to do operational work and you will hate the corporate life. PPOs are dependent on teams and some teams do not offer PPOs to undergrads. So, it all depends on your luck whether you will get the team where chances of PPO are high. On the brighter side, food and beverages are free. There is a play area where you could enjoy whenever you get bored. They have PS4 there with FIFA18. You can work from home if you do not feel like going to office. Academic courses relevant to the project: Advanced MS Excel and MS PowerPoint Name: Siddhant Narula (2014B4A80810P) Strategy and Operations for APAC: 1. Extensive work on reporting across all Markets and building Demand side views for the Leadership Team (GM Level). 2. Building strategies for Pilot Runs of various new verticals introduced in AU during my time at the company. 3. Creating Statistical Models to automate Supply analysis and creating a scoring system for supply partners. 4. Building a detailed business view for every vertical in the company by market. Tool used (Development tools - H/w, S/w): MS Excel + Google Sheets, Company Proprietary Tools, Tableau, Google Studio Objectives of the project: To create useful dashboards and business view (APAC) for the company and build on strategies for the Australia Market Major Learning Outcomes: 1. Understanding of the AdTech Industry through and through 2. Corporate Communication 3. 2018-Inmobi Insight into how the Strategy team of an organisation functions Brief Description of working environment, 19expectations from the company: Great Workplace, Amazing People to work with, Extremely positive sem1 environment with people ready to help and even interns are given responsibilities (something that rarely happens in companies) Academic courses relevant to the project: Operations Research, Probability and Statistics Name: Arkapriya Paul (2014B1A70717G) Tool used (Development tools - H/w, S/w): Tableau, MS Excel, Mobbo, PrioriData Objectives of the project: Market intelligence is responsible for gathering external -focused information according to the ask by any team in InMobi Major Learning Outcomes: Working in cross-team efforts, Secondary research Academic courses relevant to the project: Market Research Name: Afrid Sheikh (2015A4PS0139G) \*Handled On-Network advertising demand for Japan and Korea regions, along with campaign delivery pacing. \*Conducted daily optimization of campaigns, along with Margin management. \*Regularly generated and analyze profitability reports, in order to maximize profitability across campaigns. Tool used (Development tools - H/w, S/w): Excel, Powerpoint, Internal InMobi reporting tools. Objectives of the project: Management of advertising campaigns in the Affiliate Market Major Learning Outcomes: \*Understanding of the affiliate market and digital advertising market in general. \*Improvement in my business and finance acumen due to the amount of accountability and responsibility given to interns here. \*Sharpened analytics and Excel skills, as a result of extensive use of these tools. \*Improved general 2018decision making skills, communication and client management skills due to heavy involvement in the day to Inmobi 19day working of the department Brief Description of working environment, expectations from the company sem1 : Anyone looking for a fresh start in the non core field, with little to no non-core experience can definitely put this station at the top of their list. Interns here are given a huge amount of responsibility and accountability, right from day 2 here, post - briefing. The work culture and the peers here make the work seems stressless. Name: Sambhav Jain (2014B1A30230P) Tool used (Development tools - H/w, S/w): Springboot framework in Java Objectives of the project: To develop the backend API Brief Description of working environment, expectations from the company: Work culture is great. You have full freedom how you want to proceed ahead with your work and also you are given ownerships. Academic courses relevant to the project: Object Oriented Programming, DBMS Name: Harshad Bade (2015A1PS0615G)

Company	Experience	Year
Inmobi	Helped analyze and scale up accounts for the Supply Sales Team, suggested action items for scaling up revenue, co-ordinated with the demand teams of different regions to drive campaigns to get maximum revenue output. Tool used (Development tools - H/w, S/w): Microsoft Excel, R Studio, Python, Salesforce, Tableau Objectives of the project: Help Account Managers keep track and scale porfolio of accounts Major Learning Outcomes: Understanding of ad-tech industry, internal working of an organization, data handling on Microsoft Excel. Brief Description of working environment, expectations from the company: The work environment gives a lot of freedom to utilise responsibly, different events every 2-3 weeks to keep the employees happy and cheerful. Name: Asad Husain (2015A4PS0393P)	2018- 19- sem1
Inmobi	I worked in the client servicing team for Indian subcontinent. My job included data analytics and client servicing. Tool used (Development tools - H/w, S/w): MS Excel, Salesforce, Cosmos and other in house software Objectives of the project: To make sure the ad campaigns exhaust their budget while running on the given targeting given by the client, to fulfil client requirements, make presentation and submit biweekly reports. Major Learning Outcomes: Professional Etiquettes, data analytics, industry insights Brief Description of working environment, expectations from the company: InMobi is chilled out in general. You can opt for InMobi after you have been placed. There is PS4, foosball table, cricket net, TT table, gym, library, and other things to pass time at office. Food is great and refreshments are present 24x7 and everything is free to use. But it highly depends on the team where you are drafted. My team kept me busy from 10:30-11AM till 7-8PM. However there were some who worked for only 2 hours a day. Expectations vary team from team. Chances for getting a PPO are on the higher side as per my experience. Academic courses relevant to the project: Technical report writing Name: Yash Agarwal	2018- 19- sem1
Inmobi	Management of campaigns running on the Inmobi affiliate marketing network (Wadogo) originating from India and Southeast Asia. Daily optimisations and operations, fraud reduction and budget delivery. Handled revenues of \$100k daily. Tool used (Development tools - H/w, S/w): MS excel Objectives of the project: Budget delivery for IN/SEA campaigns Major Learning Outcomes: Digital advertising industry experience with a deep knowledge of the affiliate industry Brief Description of working environment, expectations from the company: Excellent working environment with an extremely friendly team. The company is extremely flexible and handles employees very well. One of the best places to work. Name: Nikhilesh Bebarta (2014A4B40571H) Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Account Optimisation Major Learning Outcomes: Familiar with numbers and what they say in a cluster Understood how to deal with different kinds clients at work Work-Life balance Reaching a breakeven in profit margin in Performance business Academic courses relevant to the project: Linear Optimization, Prob Stats, EPS Name: Sharvari Kshirsagar (2013B3A40498G)	2018- 19- sem1
Inmobi	In Wadogo, my work primarily focuses on handling supply side partnership with various direct publishers, indirect publishers, agencies etc. It involves handling a diverse set of supply partners across the globe, and providing them with appropriate campaigns, ensuring the maximum revenue burn with quality traffic and profit margin. For providing quality traffic at the required scale, I optimize the publisher traffic, using daily reports through different analytical tools. Tool used (Development tools - H/w, S/w): M.S. Excel, JIRA, Internal Tools, Appsflyer Objectives of the project: Hunting for new supply partners, and maximizing the revenue and margins for existing supply partners for Inmobi's third party affiliate marketing channel (Wadogo) Major Learning Outcomes: Inmobi has given me an amazing opportunity to learn and grow, dealing with clients across the globe. Working with different teams has helped me evolve as a team player and inculcated people management skills in me. Currently, the role I am working at, in the Wadogo team, allows me to get a hands-on exposure on how the affiliate network business functions. The kind of exposure that I have got at different verticals such as one-on-one client interaction, data analysis, negotiation skills, people skills has truly been a very enriching experience. The team has assigned me great responsibilities. Being present with new varied challenges on a daily basis stimulates my learning experience. It aids in expanding my knowledge base and improving my decision making and leadership skills. market. I have also improved my data analysis skills and MS Excel skills. Furthermore, I have gained hands-on experience with several platforms like Has Offers, IAP, Cosmos, JIRA etc. This internship has been a highly enriching and fulfilling learning experience. Brief Description of working environment, expectations from the company: Amazing environment, great colleagues and seniors. Everyone is very eager to help. An extremely collaborative learning experience. Academic cours	2018- 19- sem1

Company	Experience	Year
InMobi- Business Analyst , Bangalore	In Wadogo, my work primarily focuses on handling supply side partnership with various direct publishers, indirect publishers, agencies etc. It involves handling a diverse set of supply partners across the globe, and providing them with appropriate campaigns, ensuring the maximum revenue burn with quality traffic and profit margin. For providing quality traffic at the required scale, I optimize the publisher traffic, using daily reports through different analytical tools. Tool used (Development tools - H/w, S/w): M.S. Excel, JIRA, Internal Tools, Appsflyer Objectives of the project: Hunting for new supply partners, and maximizing the revenue and margins for existing supply partners for Inmobi's third party affiliate marketing channel(wadogo) Major Learning Outcomes: Inmobi has given me an amazing opportunity to learn and grow, dealing with clients across the globe. Working with different teams has helped me evolve as a team player and inculcated people management skills in me. Details of Papers/patents: Brief Description of working environment, expectations from the company: Amazing environment, great colleagues and seniors. Everyone is very eager to help. An extremely collaborative learning experience. Academic courses relevant to the project: Majorly requires M.S. Excel	2019- 20- sem1
InMobi- Business Analyst , Bangalore	Created, Optimized and maintained trackers that captured the entire APAC business. Optimized work output of team and reduced work input by ~50 man-hours/day. Tool used (Development tools - H/w, S/w): Excel, Google Sheets Objectives of the project: Daily reporting and making and maintaining trackers Major Learning Outcomes: Improved soft skills, Talked directly to clients, Made trackers, Learned Excel Details of Papers/patents: - Brief Description of working environment, expectations from the company: - Academic courses relevant to the project: POE; Maths 1,2, & 3	2019- 20- sem1
InMobi- Business Analyst , Bangalore	Part of the Business Insights Team wherein I worked to generate insights for the programmatic Ad delivery team. I created and maintained multiple trackers, dashboards and cadence reports. Got Hands-on experience of applying Analytics in optimisation. Also, my day to day job was crude analytics which was completely different from that written in PSD's description. Tool used (Development tools - H/w, S/w): Advanced MS Excel, Python(for data analytics), SQL, Dashboarding tools Objectives of the project: Generate insights and analyse data to support multiple teams. Major Learning Outcomes: Hands on analytics experience, Upskilled in all the BI Tools, Dynamics of AdTech industry and working in an Agile environment Details of Papers/patents: Brief Description of working environment, expectations from the company: Probably the best work environment and flat cultured organisation. Young and cooperative teammates. You are given ownership of tasks and your opinions are heard out on the table. Academic courses relevant to the project: Probability & Stats, Optimisation	2019- 20- sem1
InMobi- Business Analyst , Bangalore	1.Performance campaign management and optimization 2.Revenue tracking 3.Programmatic Advertising 4.Fraud Management 5.Attribution Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Fraud Management Major Learning Outcomes: Learnt Fraud Management Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: No	2019- 20- sem1
InMobi- Business Analyst , Bangalore	My role in the company was that of an Analyst. My work included preparation of daily reports to be sent out to publishers and assist Partner Managers in analyzing trends of various clients at regular intervals. My work also included the migration of supply inventory. Tool used (Development tools - H/w, S/w): In-house softwares, Excel, Python, SQL Objectives of the project: Upscaling of Revenue and Optimization of various Accounts Major Learning Outcomes: Gained dexterity in Excel, SQL and other in-house software.  Developed a holistic understanding of the Ad-tech Industry. Learnt how to analyse reports such that they are better suited to the company's requirements. Details of Papers/patents: Brief Description of working environment, expectations from the company: Amazing working environment with friendly teams. People here are really good and helpful. A very collaborative approach is followed in the team to get optimal results. Seniors are quite eager to help and mentor the newbies. One great thing is that you are given ownership for the work you handle and you are free to experiment things. Academic courses relevant to the project: Probability and Statistics Student	2019- 20- sem1
Innovation Labs, Bangalore	Handled the UI developments and feature development in TrKr and entire android application end of the Soul project (From researching to development and testing of the developed prototype). Tools used (Development tools - H/w, S/w):Android Studio, Java Objectives of the project: To develop a mobile based geonavigation and routing application designed to optimally provide convenient routes and navigation & to target health and nutrition industry with the help of recent technologies like WebRTC, allowing users to learn Yoga with an online yoga studio, providing real time two way interaction between instructor and class attendees. Outcomes of the project: TrKr: Sold to Wonobo, backed by Quikr and Soul: Going to raise funds soon, Framework of android app ready to showcase as prototype to the final product, Beta tests running on the prototype. Major Learning Outcomes: Mobile application development Brief Description of working environment, expectations from the company: Hosted in a rented house, small teams, and huge workload. Better internet speed expected, a more newbie friendly atmosphere expected.	2016- 17- sem1

Experience Year Company The work started on Day 1 and things start happening even before I started to understand everything, exactly what a young enthusiast like us should expect. I was given a few small tasks to do on my own. Later these tasks decided which project I'll work on. And once I was appointed a team I was contributing to it from the beginning. I worked on 3 projects during my internship (1 majorly and 2 a little). So I got to know different things during this period. My mentors sat in the same room as me and were ready to help whenever I had a doubt. But if I missed a deadline they were very pissed. All employees are very intellectual and passionate about their project. Objectives of the project: To create an online office suite and to create an app that makes decisions easier Outcomes of the project: The office suite was created and the app named 'Krowd' is on Google and Apple app store. Major Learning Outcomes: I coded in mostly in C++ and Python. I also learnt R, Autoit and SQL. My mentors were working on the AI and ML part of the 2016-Innovation Labs, Bangalore project and used to tell me about their tasks and discussed it with me on a regular basis. So I got an 17exposure to these areas too. They are ready to let interns work in these areas too but interns should have sem1 prior knowledge about it. Brief Description of working environment, expectations from the company: The office is in a residential bungalow in the Koramangala area. The first look doesn't give a very good feeling but once you enter this place and see around you will be flabbergasted. It is a budding startup and things are as it should be - bean bags, extension cords everywhere, white boards, computer peripherals scattered here and there. But once I got to know the work that is being done and the amazing people there all the above stated things didn't matter. They are an incubation center and provide technical help to people/projects who need it. So there are always around 5-6 projects on which different set of people are working. Interns were shifted to different projects during the internship. I think there are around 15-20 employees who might be 3-4 years older than us and all of them are major contributors to their projects. During my tenure, I worked on 2 projects - development of a mobile app which would suggest restaurants and development of cloud office software. In the first project, I worked on the client and server side of the app - designed a number of pages and features on both iOS and Android platform, created a few services and improved the performance of the app. With the second project, the works was mainly confined to fixing some of the bugs and modify the UI features as per specifications. Tools used (Development tools -H/w, S/w): React Native framework, Node.js, kDevelop IDE, JavaScript, Java, C++ Objectives of the project: (1) (Cloud office application) The currently available cloud office applications are browser based. They are much slower compared to the desktop office applications and also pale in comparison to the variety of features offered by the latter. So this project aims to combine the advantages of both cloud based and desktop based applications and offer the best out of both in a single package. (2) (App development) This project aims to build an app for both Android and iOS users which would suggest restaurants based on some initial input that they provide. By making use of Artificial Intelligence, the objective is to enable a way 2016to help users with decision making. Every possible data about the user's activity on the app would be used Innovation Labs, Bangalore 17to learn more about the user and present him/her with better choices in the future. Outcomes of the sem1 project: The application is complete and is available for download in both Android and iOS store. The performance of the app has been improved significantly and the code base has been cleaned to a considerable extent. Major Learning Outcomes: (1) Learning to skim through a large code base and isolate the piece of code that needs to be modified. (2) Adapting to different types of platforms and also learning to browse and find a framework which would suit your needs (3) Assimilated the entire process and different stages in the production and deployment of software products (4) Hand on experience in implementing and adopting data structures and their relevance and impact on real life situations Brief Description of working environment, expectations from the company: It is an up and coming start up located in Koramangala, Bengaluru. They have a number of interesting and varied projects to work on. It is a highly flexible environment and the mentors, manager, project heads are easily approachable. Thus, one would not only be fully equipped with details about the projects they are involved in, but also the remaining ones. If learning is your main objective for grabbing this opportunity, you won't be disappointed. This is a startup dealing with all the projects related to software. They are currently working on 4 to 5 projects which require skills of Javascript, Knex, js, Android, etc. Work environment is not that great.Employees are helpful,friendly and will always help you when required. Work hours are flexible and overall the PS-2 experience would be good for learning and experiencing. They pay your stipends through the funding received and we had problems related to this due to shortage of funds, but later resolved. Tools used (Development tools - H/w, S/w): JavaScript, node.js, Knex.js Objectives of the project: Web -2016-Innovation Labs, Bangalore Scraping (Had to crawl data from websites like zomato, foodpanda, payscale.com which was stored in the 17database and later utilized for the new app) Outcomes of the project: The data was successfully crawled sem1 and was used in the build of new app which worked with all the entities and reviews. Major Learning Outcomes: Learnt Html,CSS, JavaScript and few modules required in the process Brief Description of working environment, expectations from the company: Work environment was not that great though work hours were flexible.Employees are really helpful, friendly and interactive. It is a startup, so do not expect a lot from this station. Student

Company	Experience	Year
Intel	SPEF parasitics correlation between StarRC and ICC2. Tool used (Development tools - H/w, S/w): StarRC, ICC2 Objectives of the project: Obtaining correlation for RC parasitics between StarRC and ICC2 Major Learning Outcomes: RC extraction, signal integrity, crosstalk analysis Academic courses relevant to the project: ADVD Name: Aakash Shah (2015A8PS0392P)	2018- 19- sem1
Intel	Physical VLSI Design Tool used (Development tools - H/w, S/w): IC Compiler 2, Tcl, Perl etc. Objectives of the project: To generate a porting flow for future technologies. Major Learning Outcomes: Physical Verification, Structural Design, Tcl Scripting, STA etc. Academic courses relevant to the project: ADVD, Digital Design Name: Kautilya Phani (2015A3PS0365H)	2018- 19- sem1
Intel	I got lucky enough to be part of a live project and worked on it along with my team. I learnt verilog, perl, to languages in the process. I got my hands on real tools like Design Compiler, ICC2 shell and other intel specific tools. I performed tasks like optimization of runtime, rectify setup and hold time violations, clean design rule check and layout vs schematic errors using different types of new techniques. I learnt the graphic user interface tool and observed the placement of the cells and their gates, via, pin, ports etc. I learnt the solution approach for the problem in a vlsi industry. Tool used (Development tools - H/w, S/w): Design Compiler, ICC2 Objectives of the project: Design convergence of ASIC Major Learning Outcomes: Worked and delivered database on real time project Brief Description of working environment, expectations from the company: Work environment in Intel has been great. All employees were supportive and helpful. I got all the required support from the company. Academic courses relevant to the project: ADVD, Digital Electronics, Micro electronics circuits Name: Deep Vankani (2014B4A30637G)	2018- 19- sem1
Intel	Static timing analysis and scripting. Perl and tcl scripting to automate the tasks in the flows carried out for the design block. Getting acquainted with PrimeTime - a tool used for STA. Fixing the timing violations.  Tool used (Development tools - H/w, S/w): PrimeTime, perl, tcl Objectives of the project: Automating some tasks in the design flow Major Learning Outcomes: Static Timing Analysis and scripting Academic courses relevant to the project: Digital Design, ADVD Name: K Akshay Kumar (2014B1A30699H)	2018- 19- sem1
Intel	I have worked on verification of RTL design. My work involved using different tools to verify the design. I worked to check whether the design is clean with respect to working of power elements such as isolation cells and level shifter cells. I have also written scripts to perform quick checks on the signal dumps from a test to detect isolation clamp violations. Tool used (Development tools - H/w, S/w): VC LP, Verdi, Tcl, UPF, Perl Objectives of the project: To detect power bugs present in the design using power aware verification methodology. Major Learning Outcomes: I learnt how to work in a corporate environment The project helped me in understanding the work flow in the company: how it moves through different stages, what are the different challenges faced in each stage and how to approach them. Brief Description of working environment, expectations from the company: The amount and quality of work and the expectations majorly depend on the manager allotted. There is plenty to learn and we are free to learn and work at our own pace. The employees are extremely approachable and helpful. It is a very good place to work in. Academic courses relevant to the project: ADVD, Computer Architecture Name: Shrey Shah (2015A3PS0018P)	2018- 19- sem1

Company	Experience	Year
Intel	I joined Intel as undergraduate technical intern in the Layout Verification team. Being in one of the backend design team, I got to learn the basics of the backend process in the chip design of VLSI. My team focusing on layout verification, I have learnt a great deal about how and why verification is necessary. I also got to learn about how to resolve errors on various layers required during the chip packaging. Apart from learning about the partition verification, I learnt about the importance of scripting during the whole process of chip design and also had the opportunity to contribute in the development of scripts and also use them to develop tools. The major tasks in which I was involved were Script development and Tool development. Scripts and tools were developed to speed-up various tasks that include but are not restricted to resolving the errors in the layout of the chip. Multiple scripts have been written for resolving errors and thus speeding up the entire process of verification. Tools that have been developed are to be used in different aspects during various tasks such as reviewing errors, extracting certain data, performing various checks etc. Apart from scripting, I also got to work on a real project in the verification stage. I thank PSD and Intel for giving me this great opportunity to have a practical experience in the industry. Tool used (Development tools - H/w, S/w): ICC, ICC2 Objectives of the project: To develop scripts and tools to improve the execution and run-time of layout verification Major Learning Outcomes: Physical Verfication Process, Basics of Chip Design, Scripting Languages. Brief Description of working environment, expectations from the company: Intel had a great work environment for us interns. I was treated as one of the employee. We had to go through the same process that any joinee has to go through. We were taught about various aspects of working at Intel. The team was very friendly. Everyone was very helpful and approachable at any moment. In terms of work allotted, we	2018- 19- sem1
Intel	We worked on finding performance improvement opportunities for server machines, based on the Intel's Xeon processors' architecture and features. These were aimed at improving performance for data centers, and we tried to find solutions that work without workload specification, and tried to optimize performance and resource utilization or reduce power consumption of the system. Tool used (Development tools - H/w, S/w): Bash scripting, Linux, C and Python programming, Jupyter Notebook (python analysis software)  Objectives of the project: Exploring Performance Optimization Opportunities for Data Centers Major Learning Outcomes: Concepts of Computer Architecture, Operating systems, Data Centers, networking and optimizing resource allocation Brief Description of working environment, expectations from the company: Good and healthy working environment, good location and office. Manager and team mates were very supportive of us interns and trusted us with work that we were given. Resources and help were available to us when we required them, and we were treated like full time employees with both privileges and responsibilities. Academic courses relevant to the project: Computer Architecture Name: Sparsh Bhogavilli (2015A8PS458H)	2018- 19- sem1
Intel	Scripts to calculate % area utilized by metal layers. Shadow runs (redoing the task already done, so that you learn how to do it) of floorplanning. Tool used (Development tools - H/w, S/w): ICC2 Objectives of the project: To enhance the quality of metal density calculations Major Learning Outcomes: Floorplanning Brief Description of working environment, expectations from the company: Pretty chill. No in time restrictions. Can Work from home. Free drinks & coffee throughout the day. Academic courses relevant to the project: ADVD (very small part of project is relevant, rest is new) Name: Shreeya Nasa (2015A8PS0437P)	2018- 19- sem1
Intel	The idea of my main project is to design a tool/script which helps in reducing the number of hold time violations, without introducing any significant number of setup violations. The existing tool in use blindly keeps on adding buffers in path whenever it encounters a hold violation. The intent behind developing this script is to smartly decide what techniques can be brought into use and to remove as many violations as possible, without adding any buffers in the path (since it leads to more congestion and routing issues). Tool used (Development tools - H/w, S/w): Unix, PrimeTime Objectives of the project: To design a tool/script which helps in reducing the number of hold time violations, without introducing any significant number of setup violations. Major Learning Outcomes: Perl, TCL, STA, ASIC Design Flow Brief Description of working environment, expectations from the company: An overall positive atmosphere to work in. Name: Smruthi Balaji (2014B2A80783H)	2018- 19- sem1
Intel	Work is done in the field of formal verification. A novel method of solving performance related issues using formal methods of verification are being tried. Brief Description of working environment, expectations from the company: Manager and team are great. They are understanding and helpful. Name: Vrunda Tol (2014B2A30308P)	2018- 19- sem1

Company	Experience	Year
Intel	The initial part of the internship was familiarization with the VLSI Design Flow and the tools used in the industry: Design Compiler, IC Compiler, and Primetime. Minor tasks to write Perl/Tcl scripts to overcome logical errors in the design's timing analysis were given. The project involved analyzing the correlation in hold slacks between ICC-2 and Primetime. I learned the details of Parametric On-Chip Variation modeling, which was used to generate timing reports in both the reports. In the process of investigating for the reasons because of which the slacks differ in ICC-2 and Primetime, I learned about the inputs which are applied in both the tools, the POCV LVF, and distance-derate data, and also about the different timing applications options/variables that control the flow. One of the major reasons for the difference in slacks is that the SPEF (Standard Parasitic Extraction Format) file taken in Primetime is from another tool StarRC. After correcting other settings that lead to the difference in delay and getting a tighter correlation in SPEF, the internal hold fixes need to be introduced in ICC-2 in the next phase of the project. This analysis needs to be done for multiple corners and modes. Tool used (Development tools - H/w, S/w): Tools: IC Compiler, Primetime, Design Compiler. Scripting Languages: Perl, Tcl Objectives of the project: To optimize ICC-2 in order to get a tight correlation between ICC-2 and Primetime Major Learning Outcomes: Familiarization with the tools used for design and timing verification and the process of VLSI Design Flow. Brief Description of working environment, expectations from the company: The working environment is good. The employees and managers are willing to help in the whole team. They are busy with their work, so the interns have to follow up persistently. There is not much pressure from the company. The work can be done at one's own pace. Interactions with manager and mentor regarding the project are the best part for learning. Academic courses relevant to the project	2018- 19- sem1
Intel	Writing scripts to automate the generation of DFT structures on a floorplan using ICC2 database. Was also trained and involved in floorplan execution of live projects at Intel. Tool used (Development tools - H/w, S/w): Perl, TCL, ICC2 Objectives of the project: To reduce the manual effort and automate the DFT structures generation Major Learning Outcomes: Got an industrial exposure to back-end VLSI design and have learnt scripting languages like Perl, TCL Brief Description of working environment, expectations from the company: Intel has very good working culture and a good training schedule programmed to get an over all idea about all the steps involved in VLSI designing	2018- 19- sem1
Intel India Technology , Bangalore	Developed a loadable kernel module consisting of a generic PCIe driver for testing device's capabilities like Function Level Reset, Message Signaled Interrupts, and I/O Virtualization and created user and test applications for communicating with the driver through IOC and sysfs. Tool used (Development tools - H/w, S/w): SW: C, Perl, Make, GDB HW: FPGA, ASIC Objectives of the project: To create a loadable kernel module consisting of a generic PCIe driver Major Learning Outcomes: Kernel Module Development Details of Papers/patents: Brief Description of working environment, expectations from the company: • Collaborated with team validating subsystem responsible for Virtual Switch Scaling in network applications. • Developed a loadable kernel module consisting of a generic PCIe driver for testing device's capabilities like Function Level Reset, Message Signaled Interrupts, and I/O Virtualization. • Designed Direct Memory Access APIs for runtime memory allocation for mapping to the subsystem • Interfaced user and test apps with the above kernel module through IOCTL and sysfs Academic courses relevant to the project: Operating Systems, Computer Architecture, Data Structures and Algorithms	2019- 20- sem1
Intel India Technology , Bangalore	RTL integration of PCI-Express Subsystem in IoT Accelerator. Tool used (Development tools - H/w, S/w): Synposys coreTools, Lint and CDC GUI Objectives of the project: Effectively integrate PCI-express subsystem in the SoC Major Learning Outcomes: The whole flow and working of RTL integration of a component in SoC Details of Papers/patents: Brief Description of working environment, expectations from the company: The work ranges from hardware to software related. The working environment is encouraging for someone interested in core electronics. Academic courses relevant to the project: Digital Design	2019- 20- sem1
Intel India Technology , Bangalore	RTL integration of Intellectual Properties into System on Chip. Additional work on Quantitative memory Selection Methods. Tool used (Development tools - H/w, S/w): Verilog, Verdi, Intel propreitary tools Objectives of the project: Integration and follow up with functional verification changes. Major Learning Outcomes: Modern Systems and prevalant protocols. Details of Papers/patents: Conference paper on "Quantitative approach to SRAM Selection Methods" in Intel's private conference Brief Description of working environment, expectations from the company: Approachable and open employees, counter-intuitively hardworking environment. Academic courses relevant to the project: Communication Networks, Some part of Microprocessors course. (you will only work with communication ports, not processing architectures.)	2019- 20- sem1

Company	Experience	Year
Intel India Technology , Bangalore	Spent the first few months working on a project which was aimed at increasing the debug capabilities of FPGA prototyping by capturing data and storing it at user defined points. Work included writing modules in system Verilog for the capture and propagation of the trigger and movement of data on a multi-FPGA platform using AVST interfaces. The next 3 months, I worked on the board bring-up of a project, which included file list generation, elaboration and verification of the project and removal of gated clocks and other non-FPGA friendly components. Tool used (Development tools - H/w, S/w): Synplify premier, Quartus, Dve Objectives of the project: Improving the debug capabilities of FPGA protyping Major Learning Outcomes: Learnt about the processes involved with board bring-up of a project. Also improved my knowledge of system verilog and learnt things like using inout ports, macros ets. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: FPGA lab course, Digital Design	2019- 20- sem1
Intel India Technology , Bangalore	As a part of my PS-2 project I was involved in testing of the automation software used in the Intel Factories across the world manufacturing chips. I had also developed new features for an automation system. While developing new features, I have majorly worked with developing better User Interface incorporating the new requirement by the customer. At the interface level I also had to design effective algorithms to deal and modify the data that was being given as the input. This later had to be passed on to the Database. Communication channel, had to be established between the User Interface and the Database, was also developed as a part of the project. I had to design the functions for transferring the data that the user inputs in the User Interface to the Database. Tool used (Development tools - H/w, S/w): C#, .NET, Prism Objectives of the project: Develop new features in the applications used by the customers, as per the business requirements Major Learning Outcomes: C#, Software Development Life Cycle, Software Testing, Prism, .NET Framework, Design Patterns for developing User Interfaces(MVVM) Details of Papers/patents: Brief Description of working environment, expectations from the company: There are a lot of learning opportunities at Intel. The team was very helpful in achieving the business goals. Academic courses relevant to the project: C Programming, Data Structures and Algorithms, Object-Oriented Programming	2019- 20- sem1
Intel India Technology , Bangalore	Worked on pre si validation of radio ip part of data communication chips produced by Intel. Tool used (Development tools - H/w, S/w): System verilog, vcs, Perl, vhdl, synopsis tool Objectives of the project: Learn CPRI interface part of 5G networks and work on soc validation of it Major Learning Outcomes: Learnt CPri interface part of 5G networks and worked on soc level validation and design Details of Papers/patents: - Brief Description of working environment, expectations from the company: The working environment was up to my expectations and the people around were helpful and I have learnt a lot from them Academic courses relevant to the project: Digital design, computer architecture, analog digital vlsi design	2019- 20- sem1
Intel India Technology , Bangalore	The spec file is written using tcl and clock tree design. This spec file is dumped into clock building tool. The tool automatically does the placement and routing. After this, manual routings is performed for the input and outputs, because tool performs routing only between the two cells. And reach the targeted skew. Here the skew is reduced to 94% of the initial value Tool used (Development tools - H/w, S/w): ICC2, Clockbuilder Objectives of the project: The objective of this project is to apply different design constraints at synthesis and physical design stages to meet the required design requirements. The constraints given in this project are: • Macro placement, hard blockages at floor plan stage. Major Learning Outcomes: The project mainly involved the proper design of the clock distribution network ensuring that critical timing requirements are satisfied with minimum skew and latency. Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment in Intel is excellent. It has a great work life balance. The learning experience is also good. The team is very supportive and helps a lot. Academic courses relevant to the project: VLSI Design, Advanced Vlsi Design Student	2019- 20- sem1
Investopad	Data integration with Salesforce, report of promising startups in Blockchain and bit to facilitate admins handle multiple WhatsApp groups Tool used (Development tools - H/w, S/w): Vue.js, MySql, Selenium, python Objectives of the project: Increase work effeciency Major Learning Outcomes: Automation, data processing Brief Description of working environment, expectations from the company: Nice working environment, no pressure of work. Academic courses relevant to the project: Startups courses	2018- 19- sem1
J P Morgan Services Pvt. Ltd.	Working in Credit Risk team, my work involved analyzing the investments in municipal bonds held by Chief Investment Office and Treasury at J. P. Morgan. The credit analysis includes but is not limited to financial statement analysis, business analysis, industry analysis and peer comparison. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: CREDIT RATING AND ANALYSIS OF MUNICIPAL BONDS Major Learning Outcomes: Financial statement analysis, Business analysis, Industry analysis, Peer comparison analysis and Working of Municipal bonds in the United States Academic courses relevant to the project: Fundamentals of Finance and Accounting Name: Shubham Aggarwal (2015A3PS0226P)	2018- 19- sem1

Company	Experience	Year
J P Morgan Services Pvt. Ltd.	Built a system to extract relevant information from a corpus of data and display it in graphical form. Tool used (Development tools - H/w, S/w): Python, intellij etc. Objectives of the project: To extract important information from a corpus of data Major Learning Outcomes: Learned how to practically apply neural networks. Brief Description of working environment, expectations from the company: Really helpful people and a great learning experience. Academic courses relevant to the project: OOP, NNFL Name: Nihal V P (2015A3PS0246P)	2018 19- sem1
J P Morgan Services Pvt. Ltd.	My work was to build an Android application that helps an employee to easily do many day to day activities like booking a meeting room,locating someone and exploring the office. I was working on the part that helps an employee to search for some other employee and locate him. My initial work also included building some poc applications for different mapping providers so as to select one of these to be used in the web, Android and iOS applications. After the selection all the components would integrate this mapping provider in their service. Tool used (Development tools - H/w, S/w): Android Studio, Bitbucket, Intelli J, Android Development Objectives of the project: Create an application called My workplace that helps an employee to easily do many day to day activities like booking a meeting room, locating someone and exploring the office. Major Learning Outcomes: I was able to learn how to build an Android application Brief Description of working environment, expectations from the company: Very supportive and helpful colleagues Academic courses relevant to the project: OOP Name: Shubham Rathi (2015A3PS0333H)	2018 19- sem1
J P Morgan Services Pvt. Ltd.	Source and interpret company and industry information from a variety of data sources, including company reports, the Internet, online databases and J.P.Morgan proprietary content with an aim to forming views on the industry, key trends and individual companies. Summarize and synthesize news updates/research reports on priority clients, weekly industry report for Industry bankers and updates for ongoing Equity mandates, for both internal and external use. Financial analysis: Analysis and interpretation of financial statements including preparing trading and transaction comparables and benchmarking for companies in the sector/ products covered. Extract information from the company accounts, databases and other sources, using accounting knowledge and judgment. Pitching material preparation: Work with associates and analysts in Mumbai and across regional locations to prepare marketing materials for clients including target companies profiles, pricing and market information, market and industry landscapes, financial analysis & benchmarking etc. Industry or Product coverage: Work with analysts and associates at Mumbai to develop and apply industry/geographic market fundamentals (e.g. impact of economic/market conditions, terminology, competitive landscape, risks, trends) for the firm's clients across the globe. Tool used (Development tools - H/w, S/w): Bloomberg, Factset, MS office suite (Pitchpro+ included) Objectives of the project: Making pitchbooks and researching data for front end bankers as they require Major Learning Outcomes: In-depth knowledge of industry/sector the student is allotted. Significant insight about investment banking industry. Brief Description of working environment, expectations from the company: Working environment is relaxed but professional behavior is expected. Clarity in basics of each course is appreciated. Academic courses relevant to the project: FoFA, FM, DRM, BAV and SAPM Name: Lokesh Gandham (2015A7PS0143P)	2018 19- sem1
J P Morgan Services Pvt. Ltd.	Implemented apis for pushing load balancer configuration onto F5 load balancer. Tool used (Development tools - H/w, S/w): Python, Django, Celery Objectives of the project: Automation Major Learning Outcomes: Writing efficient code, interpersonal skills Academic courses relevant to the project: Computer Networks Faculty Name: Ashish Narang Tool used (Development tools - H/w, S/w): RubyOnRails, HeidiSQL Objectives of the project: Project revolved mainly around product development, developing the product from scratch from make my wireframe to launching it. Major Learning Outcomes: Product Management, Fluency with RubyOnRails, Communication skills Academic courses relevant to the project: OOP Name: Rajaram Arun (2014B1AB0054P)	2018 19- sem1

Company	Experience	Year
J. P Morgan CIB-RFT, Bangalore	I would really recommend this station to people who're interested in understanding how technology works with finance. JP Morgan is one of the biggest banks in the world and therefore, the scale at which projects are undertaken is mind boggling. I was fortunate enough to be a part of one such project and got to witness how a project is kick started while involving people from various domains. Developing a web UI while keeping the interest of all the users and risk managers isn't nearly as easy as writing about on some pdf that probably someone is going to read. Tools used (Development tools - H/w, S/w):D3.js. Angular.js polymer.js. Jquery.js Objectives of the project: Development of a web UI Outcomes of the project: Developed web UI Major Learning Outcomes: A plethora of web technologies Brief Description of working environment, expectations from the company: People are really amicable and helpful. Don't be surprised if the person sitting next to you is a Python god. People work on java, hadoop and Python depending on the team you're part of. Mentor Anudeep was assigned the project of automating the product web UI using Selenium as a tool after going through the initial task of learning about the product workflows. Anudeep has successfully completed the above project for 8.2 version of the product and has been instrumental in suggesting some of the design changes in the framework. He has been diligent in his attendance and took minimum break. He constantly follows up his doubts till the thing is resolved. The work done by Anudeep is now part of the automation framework. I wish him all the best for his future endeavors. Krishna has developed the test framework using Selenium in JAVA. He has automated most of the important features. The scripts will be used in regression testing of the product. The test cycle has reduced considerably due to the test framework. Krishna has been a quick learner and could understand the framework in short time and started developing scripts very fast. He has been able to solve any co	2016- 17- sem1
Jarvis Consulting	Website design for easing of fuzzy match on two overlapping datasets, Quality control of the datasets generated through different fuzzymatching and elastic search results, development of html page layouts for data presentation in the required format. Tool used (Development tools - H/w, S/w): Python, html Objectives of the project: Improve the quality of the datasets obtained through different sources, cleaning and standardisation including quality control. Major Learning Outcomes: Latest technologies used in the data analytics industry, work culture Brief Description of working environment, expectations from the company: Friendly work environment, mostly data handling using python, excel and other data analytics tools. Name: Nitin mankani (2014B5A10881P)	2018- 19- sem1
Jarvis Consulting	Started working with data team and we focused ourselves on text data, Our work was to collect the data from various websites (web scraping), this is one set of data and clean another set of data which was given to us and map these two sets of data. Mostly the work involved python and to be specific dataframes, dictionaries, list, and a little bit of image processing. Tool used (Development tools - H/w, S/w): Python, Excel Objectives of the project: To clean, map and present the data in a specific format given to us Major Learning Outcomes: Applications of data frames, dictionaries, list and how to work with them in general. Brief Description of working environment, expectations from the company: Working environment is not suitable for an intern, There is no proper hierarchy in the firm which makes it a lot difficult to communicate with my superiors, even with my mentors. Lack of professionalism is there. Academic courses relevant to the project: A basic knowledge in python, EXCEL will help Name: Umang Garg (2014B1A1029P)	2018- 19- sem1
Jarvis Consulting	Data Analytics of text data using tools and techniques of Python, Sql and Excel. Tool used (Development tools - H/w, S/w): Python, Sql, Jupyter Notebook, Excel, R Objectives of the project: Data cleaning, Standardizaton and Analysis of Text data Major Learning Outcomes: Using Python and excel for data analysis of text based data. Brief Description of working environment, expectations from the company: Worked with highly motivated people for 6 days a week to achieve the results of the project. Academic courses relevant to the project: Computer Programming, Data Structures and Algorithms, Machine Learning Name: AKASH SHARMA (2015A4PS0408P)	2018- 19- sem1
Jarvis Consulting	Implemented an index backed by Data Analytics as well as an automated framework and a classification model that extracts, cleans and analyses unstructured demographics data for 9.5+ lakhs booths of India using set of attributes collated from multiple sources. This automated model will act as micro-targeting strategy for grass root outreach program to the potential voters for Indian General elections 2019 Tool used (Development tools - H/w, S/w): Python, MS-Excel, PostgreSQL, HTML Objectives of the project: Data cleaning, extraction and mapping using Python and PostgreSQL Major Learning Outcomes: Practical application of data analytics using Python and MS-Excel, Handling data operations with PostgreSQL and automating PDF generation using Python and HTML Academic courses relevant to the project: Data Analytics Name: Saurabh Borse (2015A4PS0397P)	2018- 19- sem1

Company	Experience	Year
Jarvis Consulting	Web development using RubyOnRails. Tool used (Development tools - H/w, S/w): RubyMine, SQL, VBA. Objectives of the project: Developing Web Application for Client. Major Learning Outcomes: Learnt Web Devolopment. Brief Description of working environment, expectations from the company: Our project involved a team of developing product. Academic courses relevant to the project: OOP, DSA, WebD. Name: Lavkush Upadhyay (2015A5PS0947P)	2018- 19- sem1
Jarvis Consulting	Mapping, standardization and cleaning of data and providing client data in structured format. Tool used (Development tools - H/w, S/w): R, Python, Excel, PostgreySQL Objectives of the project: To provide client data in a well structured format for further analysis. Major Learning Outcomes: Text analysis of data Brief Description of working environment, expectations from the company: Jarvis Technology is a Political consulting firm which helps client in providing tech support during election campaign phase. I am the part of the data team where our work is based on text analytics. Company soon will be going to degitilise election campaign phase.	2018- 19- sem1
JDA Hyderabad	Developing a end to end ecosystem test automation suite for a SAAS application. Tool used (Development tools - H/w, S/w): JavaScript Selenium Webdriver Protractor Objectives of the project: Automating UI tests of application before production push Major Learning Outcomes: Automating Testing Name: Abhishek Singh (2014B2A20150P)	2018- 19- sem1
JDA Hyderabad	Projects on web development. Tool used (Development tools - H/w, S/w): PHP, JavaScript and Ajax without any framework Objectives of the project: to make portal for the clients of company all around the world Major Learning Outcomes: Php, javascrip and the use of Ajax in web development Name: Rudrakh Panigrahi (2015A3PS0289P)	2018- 19- sem1
JDA Hyderabad	Work was primarily based on the Software Development Life Cycle (SDLC) of a product. As an intern, it will be expected to automate manual checks and help in performing daily builds as requested by the team. There were some workshops/trainings on version control and application security. Tool used (Development tools - H/w, S/w): Most of the internship required python scripting/ bash scripting skills. Sometimes I was given some CI/CD tools to learn about, but the most important skill that was used is python. Objectives of the project: Development and maintenance of a Continuous Integration/Deployment pipeline Major Learning Outcomes: SDLC, DevOps, CI/CD development, Application Security Brief Description of working environment, expectations from the company: The working environment was good. There was ample of free time to hone new skills. But don't expect data science/research oriented projects here. Most of the projects assigned here were DevOps app support/QA automation. Academic courses relevant to the project: CP, OOPs Name: Shaleen Mundra (2015A3PS0804P)	2018- 19- sem1
JDA Hyderabad	Project on automation and web development. We automated a whole application as a part of QA role. We learnt about JS, Protractor, Selenium Webdriver, and automation in general. Tool used (Development tools - H/w, S/w): Protractor, Selenium, JS Objectives of the project: Automation Major Learning Outcomes: javaScript, automation Brief Description of working environment, expectations from the company: Work environment is very chilled out and there is no pressure on students. this review may vary from team to team though. My team was one of the best and I was satisfied with work and feedback given to me. There was proper guidance and smooth workflow though at many time we were free and were encouraged to pursue our own projects. Academic courses relevant to the project: C programming, OOP, DSA Name: Siddharth Kumar Shukla	2018- 19- sem1
JDA Hyderabad	Worked on automation of manual testing. I automated the testcases which were earlier done manually. It required a deep knowledge of Selenium webdriver. Also, I worked on improving the existing framework. Tool used (Development tools - H/w, S/w): Selenium web driver Java, Html, CSS, JavaScript Objectives of the project: To automate the test cases which were earlier done manually Major Learning Outcomes: Learnt Selenium, Improved efficiency of few Algorithms, Improved the existing framework Brief Description of working environment, expectations from the company: There was a lot of work in the team I was allotted to. In few of the teams, interns were assigned no work while in others; they were assigned to much work. So, it all depends which team you get allotted to. Academic courses relevant to the project: Object Oriented Programming Supply Chain Management Name: SANJO SHAJU (2015ABPS0730H)	2018- 19- sem1
JDA Hyderabad	Created a desktop application that is used to create dashboards for the data from JDA Space planning software. Automated a process for getting data from excel files to SQL Servers, which had many constraints that had to be followed. Manipulation of data received from client using python Tool used (Development tools - H/w, S/w): Electron JS, Node JS, SQL Server, Oracle database, TOAD, IBM Cognos Objectives of the project: To make the data analysis clearer and more intuitive Major Learning Outcomes: Web development and data analytics Brief Description of working environment, expectations from the company: Work life balance was great Name: Rohan Agarwal (2014A5PS0792P)	2018- 19- sem1

Company	Experience	Year
JDA Hyderabad	My project was development of cloud portal which would help the company to handle day to day tasks easily and efficiently. Backend part was made in python, Django and django REST Framework and frontend was made in reactJS Tool used (Development tools - H/w, S/w): Postman, RDP, Putty, AWS EC2 Objectives of the project: The objective of this project was to learn the new technologies Major Learning Outcomes: Python, Django, ReractjS and Django REST Frameowrk Brief Description of working environment, expectations from the company: The working environment of the company is casual and there are very less projects related to development except in product development department of the company Academic courses relevant to the project: OOP, SCM, Web development course Mentor Designation: Project Manager, Global Delivery Comments: Students are committed to work with good programming acumen. They picked up technologies like .NET and SQL server on their own and came up with solution possibilities. Time discipline and self driven approach need to be sharpened.	2018- 19- sem1
JDA Software Private Limited, Bangalore	Worked on company's existing mule application which was basically developed on Anypoint Studio using java, xml and json languages. Performed testing, fixed bugs, implemented some other features and documented implemented features and published to Anypoint Exchange. Tool used (Development tools - H/w, S/w): Mulesoft's Anypoint platform and Postman Objectives of the project: To publish the project to Anypoint Exchange Major Learning Outcomes: Learnt about mulesoft, postman, xml and json style sheet languages and web services. Brief Description of working environment, expectations from the company: Project given was decent and timings are flexible Name: AKHIL SAI ARAJA (2015A2PS0609H)	2018- 19- sem1
JDA Software Private Limited, Bangalore	Designing a dashboard for the team so that all the customer and employee data can be accessed on a single site. Tool used (Development tools - H/w, S/w): Oracle SQL developer, Visual studio 2017 Objectives of the project: Designing a dashboard for the team so that all the customer and employee data can be accessed on a single site. Major Learning Outcomes: ASP.NET, bootstrap, HTML5, css and js. Django framework and python Oracle SQL developer and mySQL Academic courses relevant to the project: Object Oriented Programming Name: Rahul Saini (2014D2PS0972P)	2018- 19- sem1
JDA Software Private Limited, Bangalore	I worked on the Channel prioritisation and came up with solution to automate the process of setting the priority of each location by the system itself In JDA Fulfillment Product, customers had to manually set the priority of the place where the demand is to satisfied by the system which in large SKU( Stock Keeping Unit) becomes very hectic and unproductive to manually set priority for each location in the SKU. After Automation of Channel Prioritisation the system will automatically set the priority of the location based on the stock available, previous order history, type of demand etc. This project was specific requirement of one of the customer of JDA who wanted that in case of constrained supply there most important customers receive supply first. Tool used (Development tools - H/w, S/w): Toad for Oracle to create MySQL scripts. Objectives of the project: To Automate the Channel Prioritization process and to delete the obsolete data present on the JDA Fulfillment Product. Also, in case of limited supply the most important customers receive supply first. Major Learning Outcomes: 1- Learned about the Fulfillment process. 2- Learned how to use the JDA Fulfillment Product. 3- Learned how to deal with customer issues related with JDA fulfillment Product. 4- Worked on the Channel prioritisation and came up with solution to automate the process of setting the priority of each location by the system itself. 5- While Automation of channel prioritisation it will also delete the obsolete data. 6- Learned SQL(Structured Query Language) and how to manage Database. 7- Learned how to use the software Toad for Oracle. 8- Learned about the Presentation making and presenting skill. Academic courses relevant to the project: Supply Chain Management, MMCD( Mass Media and Content Design). Name: Buddhavarapu spandana (2013B2A20826P)	2018- 19- sem1
JDA Software Private Limited, Bangalore	Created a website to automate processes for workforce management retail division Tool used (Development tools - H/w, S/w): Bootstrap, JavaScript, PHP, sql Objectives of the project: To automate processes in wfmr division Major Learning Outcomes: Learning to build a website from scratch Brief Description of working environment, expectations from the company: Working environment is very good, no restrictions, free lunch, freedom to improvise Academic courses relevant to the project: Programming in C Name: Pratibha Kumari (2015B4TS0978P)	2018- 19- sem1
JDA Software Private Limited, Bangalore	Tested and Modified the software Factory Planner and helped team in making the successful release of FP cumulative patch 2018.1.0.1 Tool used (Development tools - H/w, S/w): IntelliJ, Jira, VisualStudio Code Objectives of the project: To test and modify the software FPUI(Factory Planner User Interface) using Adobe AIR Major Learning Outcomes: ActionScript, Java, and Angular 4. Brief Description of working environment, expectations from the company: Co-operative and helpful co-workers, good work environment Academic courses relevant to the project: OOP, OS and Optimization Name: Vishal Ojha (2015A4PS0432P) Tool used (Development tools - H/w, S/w): PHP, HTML, CSS, JavaScript Objectives of the project: Web Development Major Learning Outcomes: PHP, HTML, CSS, JavaScript Name: Haroon Khan (2015A1PS0675P)	2018- 19- sem1

Company	Experience	Year
JDA Software Private Limited, Bangalore	Supported the cloud automation team with various skills both present before hand and learnt over the course of the PS. It included writing scripts to help create various portals that would be used by JDA clients as well as employees. Also occasionally building entire portals from ground up. Tool used (Development tools - H/w, S/w): JavaScript, PHP, Ajax, Bootstrap, HTML/CSS, Python, C#, Visual Studio Objectives of the project: No fixed objective due to the diversity of work provided Major Learning Outcomes: Better understanding of design patterns, new languages learnt that are largely used for web development, balancing time and work to meet deadlines. Name: Swaroop Goli (2015A5PS0861H)	2018- 19- sem1
JDA Software Private Limited, Bangalore	Worked on the demonstration of an IoT device which is used for the ware house security check-in, which includes demonstration of blinking of an LED and displaying a message on an LCD. Tool used (Development tools - H/w, S/w): Raspberry Pi, Python Objectives of the project: To make the IoT device work, especially for the Ware house security check-in. Major Learning Outcomes: working of Raspberry Pi, coding in Python, making an LED to blink, displaying a message on an LCD. Brief Description of working environment, expectations from the company: More than a corporate environment, this is more likely to be a friendly environment and though there aren't any strict timings for to be followed, but one needs to deliver expected results and meet all the deadlines irrespective of how much time one works in the office. Academic courses relevant to the project: C, OOPs, working of an arduino or RPi (specifically), Basic knowledge about circuits and connections. Bangalore Student Name: M.Vijay Vikas (2015A4PS0324H)	2018- 19- sem1
JDA Software Solutions , Bangalore	Developed a regression testing suite for unit testing of SAP adapter with the help of JAVA and FitNesse, the suite included connections to SAP, API calls to create, update and delete the data, to fetch the data and to pass it to the adapter and the taking it into a message broker and validating the messages. Bug fixes and implementation of new features in other projects. Tool used (Development tools - H/w, S/w): Apache activemq, JAVA, FitNesse, Junit, Maven, Mule anypoint studio Objectives of the project: To develop a testing suite for unit testing of SAP integration adapter. Major Learning Outcomes: Better working with bigger code bases Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Good working environment, quite flexible office timings. Academic courses relevant to the project: NA	2019- 20- sem1
JDA Software Solutions , Bangalore	Project 1. The installation process of the WMS environment is a very pain staking and time consuming task. For employees, it is very important to cut down on time wastage, as it adds to the productiveness of the company. Hence, the automation of the installation process was the absolute need of the hour. Project 2. The latest version of the JDA Windows WMS software has a lot of issues with its UI, which have to be resolved before releasing the new version to the clients for further use. Project 3. With any software, in its initial stages, there are a lot of issues that must be resolved. Finding those errors is a very important task, as these errors, if not escalated and brought to the attention of the concerned parties, may then further be incorporated into the final build of the software. This would lead to the customers using this faulty edition of the software, and dealing with inconveniences. This reduces customer value proposition, and can even lead to loss of customers due to a dissatisfying experience. Hence, it is extremely important to test the software well and report all the errors, so as to ensure effective performance of the software, as well as avoiding failures in the initial stages of the build and avoiding expensive amendments in the later stages of development. Tool used (Development tools - H/w, S/w): Activex, ANT, RedPrairie, Visual Studio, Git Bash, Perl, Java development kits, Python, SourceTree, SQL, Eclipse, Git bash, TCCLE, AppServer, windows batch script, Mongodb Compass, Postman, JIRA, Putty, WinSCP, Oracle18, LINUX, InstallAnywhere, SQL server Objectives of the project: Project 1: Each repository takes quite a while to build, each taking an average of 25 minutes. Moreover, every build step encountered various problems, such as the master versions not being correct, or the Java version not being the right one. Hence the Major Learning Outcomes: Improving on coding skills(Java and Python), building databases on DBMS like SQL developer and SQL server, better understanding of the company	2019- 20- sem1
JDA Software Solutions , Bangalore	Worked on developing tools to help in automated API and adapter testing. Continuous integration (CI) and continuous delivery (CD) pipeline development for cloud deployment of JDA connect on Azure. Tool used (Development tools - H/w, S/w): Anypoint Studio,Python,Groovy,BatchScript Objectives of the project: Developement of an Integrated and Automated environment for JDA Connect Major Learning Outcomes: Work flow in a workplace environment Details of Papers/patents: Brief Description of working environment, expectations from the company: The workplace was very employee-friendly with flexible timings and people in the team had apt knowledge of how the project, JDA Connect, was developed and worked in its entirety. Academic courses relevant to the project: Object Oriented Programming, Network Programming	2019- 20- sem1

Company	Experience	Year
JDA Software Solutions , Bangalore	During my PS-2, I worked on 2 separate projects. First project was to extract company data from remote servers by hitting JIRA rest API's. We then conducted some algorithmic analysis on the data using python. Second project was to create a machine learning model to predict the time taken to complete different software problems and issues faced by employees and customers. Several parameters like severity, issue type etc were considered. I was able to complete the projects with desirable results and learnt a decent amount from the experience. Tool used (Development tools - H/w, S/w): ML python libraries(scikit-learn, numpy, pandas), python, Jenkins, JIRA rest API's Objectives of the project: Extraction and analysis of company data, ML model to predict time taken to solve issues. Major Learning Outcomes: Learnt to work with API's and create ML models. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment was decent. Initially, I was given a bunch of side projects to work on, which I was able to complete easily. Academic courses relevant to the project:  Machine learning courses. Expect work along lines of testing, data collection, data cleaning etc., in case of most departments. Academic courses relevant to the project: None. A few OOP and database concepts will inevitably be used as in any soft dev role. Student	2019 20- sem1
JDA Software Solutions , Hyderabad	Project consisted of making a Sales Dashboard using React.js. The dashboard consisted of Charts and visualizations reflecting the sales data which was fetched from a oracle database. Mostly the project work was comprised of frontend development which used React.js libraries and bootstrap except for the backend part where a REST api was made by using Node.js and express.js library. Tool used (Development tools - H/w, S/w): React.js and node.js Objectives of the project: Sales Dashboard Major Learning Outcomes: Front end development and some operations in the Back end. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is really friendly and the team members help you in every step of the way. Academic courses relevant to the project: nothing in particular	2019 20- sem1
JDA Software Solutions , Hyderabad	My project was to develop a microservice for Assortment Planning which generates 7 CSV's in GCP and appends the computed data to those CSV's when a client requests data and also to add an export job which gives error message about the status of the task. Also, I worked on automating test cases. Tool used (Development tools - H/w, S/w): Java, Google cloud Platform, Protractor, Selenium Objectives of the project: Microservice development and Automation Major Learning Outcomes: Springboot, Angular 7, JavaScript, Automation Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Object Oriented Programming Student	2019 20- sem1
JDA Software Solutions, Bangalore	The project entails developing an Automation Testing Suite that can automate all the features of SRM product as well as testing the SRM suite on various platforms. This framework can help reduce the drudgery of manual data entry too. Tools used (Development tools - H/w, S/w): Java, Selenium Objectives of the project: My work for the team Building an Automation Testing Suite for the product they designed which can be used to write test cases to test the product. Outcomes of the project: I've completed building the major part of the suite using Java's Selenium framework and simultaneously writing test cases using the classes in the built suite. Major Learning Outcomes: Working at JDA has given me the exposure to the industry out there and it also gave me an opportunity to understand how differently the things are done at academic and industry level. Brief Description of working environment, expectations from the company: The work environment of the company is pretty good but the student needs the self-drive to ask and do the work as the supervisors won't give much attention to the interns. PPO wise you can easily get the offer if you work. Overall it isn't such a bad company to work for.	2016 17- sem1
JDA Software Solutions, Bangalore	Automation of Regression Testing of User Interface for the Product Agile Control Tower using the Selenium Tool in Java Tools used (Development tools - H/w, S/w): Selenium, Java, Oracle, Weblogic Objectives of the project: Attain optimal Automation of the UI Regression Testing in a manner balancing Code coverage with Efficiency and Time taken. Outcomes of the project: Quicker and more accurate Automated testing Major Learning Outcomes: 1) Selenium and various uses of File Reading especially Excel File Reader. 2) Deeper understanding of Web Designing not to use it per say but more on how to work with it to our advantage. 3) Optimization of workflow so as to reuse same function in multiple ways without compromising the final objective while saving time. Brief Description of working environment, expectations from the company: A more helpful environment you will have a hard time to find as the employees and our managers are always ready to help and guide us if we are willing to put in the effort. The company does extract the worth of what they pay for but it is beneficial for beginners as a very good stepping stone and thus is encouraged to try for PPO.	2016 17- sem1

Company	Experience	Year
JDA Software Solutions, Bangalore	Automation testing in WMD area. Test scripts written in MOCA Tools used (Development tools - H/w, S/w): Fitnesse, Jenkins Objectives of the project: P&G product development Outcomes of the project: P&G product was developed Major Learning Outcomes: I learned how to use Fitnesse Brief Description of working environment, expectations from the company: Work environment is likeable. People are helping but the company is taking students from all branches including civil so don't expect much in terms of learning. Student	2016- 17- sem1
JDA Software Solutions, Bangalore	Validation and testing using junior and developing java based fitnesse environment for acceptance testing Tools used (Development tools - H/w, S/w): Fitness, junit, elk, toad, postman Objectives of the project: Code coverage testing, installer testing, end to end testing Outcomes of the project: Xsl, java coverage increased by 30% and installer tested and developed fitness end to end testing Major Learning Outcomes:  Java, junit, Oracle dB, fitnesse Brief Description of working environment, expectations from the company:  Validate the routs, unit testing xsl and java, installer testing drop 14,15, fitness end to end testing  Academic courses relevant to the project: Oops	2017- 18- sem1
JDA Software Solutions, Bangalore	Developed a query system and UI for Jenkins. Tools used (Development tools - H/w, S/w): Groovy, Java, Sql, Javascript, Jsp Objectives of the project: To develop a Jenkins query system that lets employees see all the required data at one place. Outcomes of the project: Scope to develop more elegant UI and integrate the queried data with machine learning and predict the job failures beforehand. Major Learning Outcomes: Learned to develop a complete web application. Brief Description of working environment, expectations from the company: Not that particular about in and out timings and the work is not at all challenging so we get a lot of free time. Overall the place is good for non IT students to get hands-on experience in coding and expose to IT culture. Academic courses relevant to the project: Oops	2017- 18- sem1
JDA Software Solutions, Bangalore	Demand Forecasting, Data Analysis and Cognos Reporting. Tools used (Development tools - H/w, S/w): Toad, SQL, Python, Cognos. Objectives of the project: To generate forecast results and to analyze the data given for prediction. Outcomes of the project: Annual and Monthly Sales could be predicted and what trends and promotions to apply are known. Major Learning Outcomes: Sql, Python, Data Munging and Analysis, learned Cognos. Brief Description of working environment, expectations from the company: Helpful, Friendly and Kind Academic courses relevant to the project: C-programming.	2017- 18- sem1
JDA Software Solutions, Bangalore	Website Development Tools used (Development tools - H/w, S/w): Html, Css, Javascript, PHP, Mysql, WampServer Objectives of the project: To develop a website for the Allocation Department to manage their employee skills and projects. Outcomes of the project: Built the website completing all the objectives Major Learning Outcomes: Learnt Web Development and languages mentioned Brief Description of working environment, expectations from the company: Stress free environment Academic courses relevant to the project: Web Development courses	2017- 18- sem1
JDA Software Solutions, Bangalore	Part of warehouse management department. Allotted project was based on continuous integration and involved building an automation to revert and fix changes. Tool building was based on Java and Git applications and learning of Jenkins interface for continuous integration Tools used (Development tools - H/w, S/w): Git, Jenkins, Java, Scripts Objectives of the project: Create and automation for finding commits causing failure of jobs by reverting and re-building Outcomes of the project: Java implementation of the tool idea which worked to get changes corresponding to a failed job Major Learning Outcomes: Git and CI working, Java implementations, API development Brief Description of working environment, expectations from the company: Work environment is decently motivating although not much emphasis is given on learning. This again depends on the department you are working in. Company expects project outcomes that are set initially but not much pressure with regards to deadline Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms.	2017- 18- sem1
JDA Software Solutions, Bangalore	I was allotted Pre-sales department of the company, in which I was allotted the Manufacturing Planning(MPL) team. My work was on supply chain, it included making dashboards and reports in Cognos for MPL products like Inventory Optimization, Enterprise Supply Planning and Factory Planner to increase its appeal and make it easier for the customer to observe their data patterns for future predictions. Tools used (Development tools - H/w, S/w): IBM Cognos, SQL, Excel. Objectives of the project: To make dashboard for the different customers of the company. Outcomes of the project: Attractive dashboards made the company to forge contracts with the customers. Major Learning Outcomes: Supply chain management. Brief Description of working environment, expectations from the company: It was good. Academic courses relevant to the project: Supply chain management, Database Management System.	2017- 18- sem1

Company	Experience	Year
JDA Software Solutions, Bangalore	Mostly helped the Automation Team of the Cloud Services Department. Developed a few minor scripts that checks server health of the company monitors and files in logging information. Created a major overhaul of the enable/disable script that helps the monitoring team in doing routine patchwork. All of it was done in batch script. Developed a log scanner in python which helped the maintenance team in quickly identifying errors during product installations. Tools used (Development tools - H/w, S/w): PYTHON, BATCH SCRIPT, PHP Objectives of the project: Scripting in Python and Batch script to automate patchwork and error handling. Outcomes of the project: Developed a Log scanner that logs in the issues encountered during software installations and a script that automates the enable/disable of the company monitors. Major Learning Outcomes: Hands on training of scripting languages and exposure to industry level applications. Brief Description of working environment, expectations from the company: Working environment is quite good. Mentors are pretty helpful. Projects were quite involving as well. Depending on your proficiency in certain skills(scripting, web development, .NET) you can ask for more challenging projects. Academic courses relevant to the project: Computer Programming, Data Structures and Algorithms.	2017 <sup>.</sup> 18- sem1
JDA Software Solutions, Bangalore	Automation of Services: Automated all the services provided in the Transportation Management Website. Tools used (Development tools - H/w, S/w): C#, Visual Studio Objectives of the project: Validation of the Transportation Services Outcomes of the project: Validation of Transportation can be done automatically Major Learning Outcomes: Experience with Software Developement Brief Description of working environment, expectations from the company: Working environment is the JDA is very good. Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
JDA Software Solutions, Bangalore	Manual form filling, especially when it gets repetitive, can usually be made more efficient via automation, saving both time and manpower. Selenium is a testing framework which can be used to write functions, such that given the right parameters, they would perform small, but often repeated tasks like opening a URL, clicking a button, sending text, etc. On this framework, we have a program developed, which is uploaded on the server (thin clients). To this program, we provide two files- a properties file, and a test cases file. It is these files that I have worked on. The test cases file is in a comma-separated values format, and contains the steps to be performed (algorithm), along with the parameters- separately for each test case. The properties file is a text file that contains the values of the parameters supplied in the test cases file (URLs, text, element locations etc.). For each module, a separate couple of properties and test cases files must be prepared. For making it user-friendly, I have created a UI for this, linking the back end with the front end. Tools used (Development tools - H/w, S/w): Selenium (test framework), Eclipse, Chrome Objectives of the project: Automation of form filling and creating a UI Outcomes of the project: With form filling not just scripted, but also user friendly (thanks to the UI I developed), employees at JDA will save countless hours of work, and focus their energies on more pressing demands. I did not know JS or Selenium before coming to JDA, but having used them in a project now, I think I have a better grasp of it. Major Learning Outcomes: Working with Selenium Test Framework, Java, Javascript (Front End and Back End), Documentation Brief Description of working environment, expectations from the company: At JDA, the working environment is nothing short of awesome. The managers are good, coworkers are nice and even the support staff is friendly- making it an agreeable workplace. The projects were delivered on time, relevant training was provided and the time limits wer	2017 <sup>-</sup> 18- sem1
JDA Software Solutions, Bangalore	Demand Forecasting using Supply chain management, tools like Toad, MS Excel and Sql Queries. Tools used (Development tools - H/w, S/w): Toad, MS Excel Objectives of the project: 1. Study the sales history. 2. Analyze history. 3. Generate Forecast Outcomes of the project: 1. Good understanding in Supply chain and Demand and Forecasting. 2. Command on Sql queries. Major Learning Outcomes: Systematic & Efficient working which saves a lot of time and effort. Working on such a big scale project definitely increased my confidence and opportunity to have a good exposure Brief Description of working environment, expectations from the company: Very healthy working environment. Employees help a lot. Although, does not have a good learning curve for every intern. Academic courses relevant to the project: 1. Supply Chain Management	2017 18- sem1

Company	Experience	Year
JDA Software Solutions, Bangalore	CLoud services Automation. Tools used (Development tools - H/w, S/w): Mostly Batch Script, Python Objectives of the project: Cloud Automation Outcomes of the project: Sitescope enable/disable automated Major Learning Outcomes: Batch Scripting, Work Ethics Brief Description of working environment, expectations from the company: Working Environment is very good Academic courses relevant to the project: None	2017- 18- sem1
JDA Software Solutions, Bangalore	Developed Scripts & tools in PowerShell to automate certain tasks undertaken by the team at JDA on windows servers to increase their productivity. Tools used (Development tools - H/w, S/w): Laptop, Visual Studio, Visual Studio Code , MS Office, Windows PowerShell Objectives of the project: To Automate certain tasks such as reporting on server health as well as making tools for managing Windows Services, Scheduled Tasks & doing product updates on multiple windows servers remotely. Outcomes of the project: Designed, Implemented & tested all Scripts and tools as per the requirements specified by my Manager and team. Major Learning Outcomes: Learnt about the following: ¢ Organizational structure and about departments at JDA ¢ PowerShell & Automation standards for windows servers ¢ Learnt About Some basic Programming principles ¢ Documentation of projects and steps followed during implementation in the industry ¢ Got Familiar with testing & Debugging ¢ Learnt about Version Control & Importance of Maintaining Proper Documentation of scripts Brief Description of working environment, expectations from the company: The Work Environment is both Professional and Good. The Managers are very friendly and very approachable. The Project plan was given to me in the beginning, so it greatly helped me prepare for the projects in advance. My mentor greatly helped me when i faced challenges doing the projects. That said, there is still a lot of bureaucracy involved and things get done slowly then they can be. Academic courses relevant to the project: Computer Programming, Object Oriented Programming, Data Structures & Algorithms	2017- 18- sem1
JDA Software Solutions, Bangalore	3 Automation Projects were completed which were aimed to help the organization financially by reducing time spent on activities and effort required. The first Project was - Automated Log Analyzer, a tool to automatically read live oracle alert logs and make meaningful sense of information by plotting histograms which are sent by mail. The second Project was JDA Server Manager, a centralized web interface for storing information on JDA customer for easy and organized access. The third Project, also the biggest one was - Upgrade Manager, a one-click solution for JDA migration procedure with automated error handling. Tools used (Development tools - H/w, S/w): Python, PyQt5, Django, HTML5, CSS, JavaScript Objectives of the project: Automating Tasks for saving time and effort Outcomes of the project: All 3 Projects were successful and tested on dev environment. Once used they are guaranteed to save time. Major Learning Outcomes: Rapid GUI Development, Python Expertise, Web Development Experience, Interface Design, Multi-threaded Programming Brief Description of working environment, expectations from the company: JDA is the best organization I've every imagined culture-wise. There is no stress from anyone but ample opportunities to prove yourself, learn and be helpful to the organization. The company doesn't want you to necessarily do anything big but if you do something huge, then you will be appraised by every single person you encounter. Academic courses relevant to the project: Data Structures and Algorithms, Operating Systems, Computer Networking, Object Oriented Programming, Databases Student	2017- 18- sem1
JDA Software Solutions, Hyderabad	Worked on a customized framework using selenium Webdriver and JAVA to create specialized methods for testing Tools used (Development tools - H/w, S/w): Eclipse, Selenium Webdriver, and Java. Objectives of the project: Creating a simpler and faster testing framework specialized for the product Outcomes of the project: Made new framework consisting different methods to reduce efforts in current methods of testing Major Learning Outcomes: Java, selenium api Brief Description of working environment, expectations from the company: Work timings are flexible and less work load.	2016- 17- sem1
JDA Software Solutions, Hyderabad	Learnt basics of Configuration management and version control. Built a cross-platform installer using InstallAnywhere. All the validations were done using Java code. Migrated a product platform from ClearCase to GIT. Tools used (Development tools - H/w, S/w): InstallAnywhere, Eclipse Objectives of the project: To build an installer for the product Warehouse Management. Outcomes of the project: Successfully built the installer. Major Learning Outcomes: Learnt to work with a team against strict deadlines. Brief Description of working environment, expectations from the company: Work environment is quit chill. There is no pressure of a sort.	2016- 17- sem1
JDA Software Solutions, Hyderabad	Complete project is on Quality Assurance by testing WebApplication using Selenium and updating the builds to latest patches so that there exists no difference in databases and results in no errors. Tools used (Development tools - H/w, S/w): Selenium, Batch Scripting Objectives of the project: Testing Web – Application Outcomes of the project: Learned about testing tools and how to ensure 100% results Major Learning Outcomes: UI Automation Brief Description of working environment, expectations from the company: Working environment is quite good and company just expects discipline and fast learning skills.	2016- 17- sem1

Company	Experience	Year
JDA Software Solutions, Hyderabad	UI Automation of web application using selenium framework Tools used (Development tools - H/w, S/w): Selenium, Jenkins, Toad, Java, SQL, GIT, batch scripting Objectives of the project: To improve and increase the testing efficiency by automation the test cases. Outcomes of the project: Automation will increase and improve the efficiency of JDA fulfillment product. Major Learning Outcomes: Got to learn about a lot of new software and tool. Along with improved skills and knowledge got to learn the implementation of academic knowledge practically and professionally. Brief Description of working environment, expectations from the company: The environment and work culture at the organization was very great. My fellow colleague, mentor and manager all were very helpful throughout my PS. There was proper training of the work before assignment of new work.	2016- 17- sem1
JDA Software Solutions, Hyderabad	UI Automation Tools used (Development tools - H/w, S/w): Selenium, Sahi, FitNesse Objectives of the project: Testing Outcomes of the project: UI Automation Major Learning Outcomes: Testing, Automation Brief Description of working environment, expectations from the company: Legendary Lite Faculty Comments: Expectations from industry: Expectations from the industry - LEAP CONSULTING is a management consulting, financial advisory and auditing firm centered at Trivandrum, with offices in Dubai and Kochi. About two years into the business, they have acquired a sizeable clientele and are looking forward to expanding to overseas business, mainly in the Middle-East. The projects allotted were research based and involved comprehensively going through industry reports, annual reports of firms relevant to the field of study, Govt. notifications and statistics collected from various sources. Apart from this, the company is under contract to perform an internal management and financial audit of SI Properties, which forms a major portion of this project. Another important work involved making a business proposal and financial projections report for another client a manufacturing firm in its set-up phase for the sake of potential investors, to raise investment for operations and set-up. Other research works included studying relevant sections of the Companies Act 2013, to find out various compliances relating to partnership firms, and other similar research works. Course Requirements 1. Finance courses As the work is related to Auditing, accounting as well, knowledge on these area is preferable. Good communication skill Industry is looking for students who can support them by gaining experience in the theory they have done and give new ideas based on that. Student	2016- 17- sem1
JDA Software Solutions, Hyderabad	Web based automation of pre-written test cases using the Selenium WebDriver framework. The Selenium WebDriver framwork exists as a collection of Java libraries that use a browser's driver functions to control it and execute a givem set of instructions. Tools used (Development tools - H/w, S/w): Selenium WebDriver, Java, Excel Objectives of the project: Test Cases had to be ported onto the framework i.e. be coded to run on the framework Outcomes of the project: 12 successful test cases were written Major Learning Outcomes: Knowledge of Web Automation. Brief Description of working environment, expectations from the company: The work environment was satisfactory. I was given a proper cubicle with all the amenities required for the project. However, the company had no expectations from us, or at least that is what it felt like. There was no clear direction in which our internship there seemed to be heading. After the work had been allotted, there was very little supervision and mentoring offered to us. Good place to learn things at, but the work experience was terrible. Academic courses relevant to the project: None	2017- 18- sem1
JDA Software Solutions, Hyderabad	Selenium Testing and Junit testing Tools used (Development tools - H/w, S/w): Selenium framework, junit framework and eclipse luna Objectives of the project: For automation and testing of functionalities Outcomes of the project: Learnt about testing and its importance Major Learning Outcomes: Testing, automation and basic coding skills Brief Description of working environment, expectations from the company: Great for doing your own thing and prepare for placements but not very interesting projects and learning opportunities. Academic courses relevant to the project: OOP.	2017- 18- sem1
JDA Software Solutions, Hyderabad	Mobile App development Tools used (Development tools - H/w, S/w): ExtJS, Android Studio Objectives of the project: Develop Transportation Management App Outcomes of the project: Created a new version of transportation management app 2017.2 Major Learning Outcomes: Code debugging in html using chrome, Java script language, OBD Diagnostics Brief Description of working environment, expectations from the company: Learning Environment, Was able to learn a lot from superiors and also was invest my free time in learning important algorithms Academic courses relevant to the project: OOP.	2017- 18- sem1
JDA Software Solutions, Hyderabad	Escrow of company product Tools used (Development tools - H/w, S/w): Toad Objectives of the project: Write batch scripts to run build for assigned project Outcomes of the project: Delivering the client the escrow version of the product Major Learning Outcomes: Software development life-cycle Brief Description of working environment, expectations from the company: The student should be proactive in learning the know hows of the work in the team. Academic courses relevant to the project: OOP. Student	2017- 18- sem1

Company	Experience	Year
Jochebed Tech Solutions, Hyderabad	The aim of my project was to find a way to communicate between two low-powered machines/sensors without opening ports. I started with benchmarking the MQTT statistics over the testing servers along with personally created system stats logger. After identifying the bottlenecks in the protocol, I created a custom protocol over MQTT making it more reliable, guaranteeing assured delivery. Tools used (Development tools - H/w, S/w): Malaria (Open Source script), VMstat, MQTT opensource libraries, Python for back-end and testing done over cloud and prod server. Objectives of the project: Communication without opening a port primarily through MQTT Outcomes of the project: Successfully developed a customized protocol to solve the unreliability in MQTT Major Learning Outcomes: MQTT library, Semaphores and Mutex, Python libraries for multi-threading Brief Description of working environment, expectations from the company: The station was a startup 2 years old with mostly telugu speaking employees. I, on the other hand don't speak telugu. Infrastructure was sub-par with a lot of construction and hardware work going on in close proximity Academic courses relevant to the project: Computer Networks, Operating Systems, Database Management System	2017- 18- sem1
Jochebed Tech Solutions, Hyderabad	Created a timed self logout page, a widget. Created a Wireshark like application which captured packets and analysed network statistics. Worked on creating an application level layer protocol based on MQTT. Tools used (Development tools - H/w, S/w): JAVA, Eclipse, C, MQTT, Arduino, pcap, python Objectives of the project: Creating an application to track network statistics. Outcomes of the project: Completed the given tasks. Major Learning Outcomes: Learnt about security aspect of networks. Learnt about MQTT. Brief Description of working environment, expectations from the company: It was a newly established startup. Learning opportunities were good. Work environment was not what you would expect at an IT company. Do not expect any fancy bean bag like stuff if you opt for it. Academic courses relevant to the project: Computer network, Object Oriented Programming	2017- 18- sem1
Jochebed Tech Solutions, Hyderabad	Developed the backend code for storing data extracted from a vehicle into a database in server and at the same time send it to a mobile application. This data will be used in the training and testing of a machine learning model which was also implemented by me Tools used (Development tools - H/w, S/w): obd2 elm, esp8266 Objectives of the project: Developing a machine learning model to predict driving patterns Outcomes of the project: Developed backend system and a basic machine learning model Major Learning Outcomes: Practical experience of a business establishment, hands-on experience on implementing machine learning Brief Description of working environment, expectations from the company: A startup environment. Great people to work with. Not exactly the environment you would be seeing in an established corporate company Academic courses relevant to the project: Machine learning, neural networks, computer networks Faculty Comments: Expectations from industry: All 4 stations: Basic Programming Skills, Excel Skills, Analytical Skills, Writing Skills, Corporate Etiquette State Street & Goldman Sachs - Basic Finance courses Genpact: Statistics Student	2017- 18- sem1
John F Welch Technology Center (GE) , Bangalore	Complete geometrical markup of 3 major powerplant projects being taken up by the company (GE), came up with novel methodologies using VB Script to support the engineering team and reduce the engineering time it would've taken for requisite domain work. Working as a support base to local R&D team as well as international engineering teams to make headway in the field of Powerplant automation. Tool used (Development tools - H/w, S/w): AVEVA E3D, MS VB Script Objectives of the project: To understand and put to use, the principles used in GA of Boiler Ducts and requisite appraisal of novel methodology devised to aid in the same Major Learning Outcomes: Understood and had the opportunity to experience, first hand, the importance of collaborative work and team-play. I also gained technical proficiency in a variety of senses, software - AVEVA E3D, Microsoft VBScript, etc, and broadened domain knowledge. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is conducive to new ideas and innovations made are duly encouraged and provided suitable ground. Co-Workers are helpful to rule out any and all doubts and discrepancies in the work methodology. Meritocracy is evident in the day to day proceedings of the company and interns are encouraged to make full use of the opportunity at hand, by involving in extra-curricular activities, apart from work. Academic courses relevant to the project: Computer Aided Design, Power Plant Engineering, Applied Thermodynamics	2019- 20- sem1
John F Welch Technology Center (GE) , Bangalore	I worked on Particle simulations in simple pipe geometries and did sensitivity analysis. I have suggested changes in burner geometry according to our igniter and got tested, validated through experiments. Tool used (Development tools - H/w, S/w): ICEM CFD, Ansys-fluent Objectives of the project: CFD Simulations in Pipe Geometries Major Learning Outcomes: Presentation Skills, Meshing Software, Simulations Software Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Computational Fluid Dynamics	2019- 20- sem1

Company	Experience	Year
John F Welch Technology Center (GE) , Bangalore	To start of, the first task was to understand the existing methods and technologies used for gas turbine rotor damping and the basics of working of gas turbine engine and provide a holistic view of existing scenario in this regard with identification of research gaps. Subsequently, finalization of an idea which can be developed into a product used for rotor damping was done after all the considerations. Finally, model setup and various computer analysis and simulations were performed to get the results of approximate damping achieved by using that idea which were converted into interpretable graphs and tables with a little bit of design optimization to validate the concept and set a reference for physical tests Tool used (Development tools - H/w, S/w): 1. Siemens NX 2. ANSYS APDL 3. Some proprietary software developed by the organization themselves for various analysis 4. MS Office Objectives of the project: The aim of the project to fill an existing research gap in the field of gas turbine rotor damping and develop a new product that can be used in the machines to provide rotor damping Major Learning Outcomes: A lot of knowledge about the basics of gas turbine engine working in real conditions and design philosophy was gained. Hands on experience with computer software for modelling and analysis. Concepts of strength of materials, finite elements analysis and v Details of Papers/patents: None Brief Description of working environment, expectations from the company: In my opinion, this company has one of the best working environments. You are provided all kind of freedom as long as you are completing the work responsibly and in time. Great office campus with lots of facilities. The people here are really helpful and would happily take time out to guide you through your task. Academic courses relevant to the project: Computer aided design, Primemovers and fluid machines, Mechanical vibrations Student	2019- 20- sem1
John F Welch Technology Center,	It is generally an automation project based on Java programming. I have to develop a steam turbine design automation tool and also test the functionality to assure quality. Tool used (Development tools - H/w, S/w): In house Tools, MS Office Tools Objectives of the project: Developing and testing of an In-house steam turbine design automation tool Major Learning Outcomes: Core concepts, Basics of Java, Business aspects, Work life balance Brief Description of working environment, expectations from the company: Very encouraging environment. Company expects to deliver outputs in time. The work isn't too hectic though. Very comfortable to work in the company and lucky to be in nice time and excellent Manager. The work allotted to me made me to contribute many things for the welfare of the project. Academic courses relevant to the project: Power Plant Engineering, Prime Movers and Fluid Machines	2018- 19- sem1
JP Morgan Chase - Technology , Bangalore	My project that is, development of Tax Engine for statutory corporate tax payments is one of the most vital projects for the biggest bank in United States, JP Morgan chase. The basic goal of the project was to unify the payment portal already existing in India, ILAS with the a unified payment portal which is already serving 4 nations. At mid-way of the project that is till September end, the progress I achieved was that of being done with the architecture of the project and identifying the components where we would apply the required technologies. The development of Transformers (Serialization and Deserialization) was done so that basic conversion from JSON to POJO (Plain old Java Object) and back. At the time of me leaving the project due to the end of my internship, I find myself done with about 60% of the project. This 60% project has been tested individually to test if the code which has been written works well. The corporate tax system henceforth developed would work in conjecture with some other countries too. Tool used (Development tools - H/w, S/w): Spring Boot, Spring Integration, IBM MQs. Objectives of the project: Migration of ILAS to TE for statutory payments and providing further enhancements Major Learning Outcomes: Development of high and low level architecture according to the requirements. Learning Java Development Framework, spring and using it on a live project. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOP	2019- 20- sem1
JP Morgan Chase - Technology , Bangalore	Project 1: Developed the backend of the project using spring boot. Used JDBC template to fetch the data from the database. For frontend react and redux were used. Project 2: Used spring-boot and hibernate to fetch data from the database and created JSON objects. Later the objects were pushed to private cloud using S3 api and a POC was done using APACHE drill that could further help the company during audits and reference. Tool used (Development tools - H/w, S/w): Java, Spring, Hibernate, React, Databases Objectives of the project: Project 1: To develop a web portal which helps to coordinate between different departments of trade. To reduce manual updating of the server details and automate the process using spring-boot, react, JDBC template etc. Project 2: To reduce the cost incurred. Major Learning Outcomes: Complete Web development and deployment Details of Papers/patents: - Brief Description of working environment, expectations from the company: Nice work culture and flexible timings Academic courses relevant to the project: DSA OOP	2019- 20- sem1

Company	Experience	Year
JP Morgan Chase - Technology , Bangalore	Involved in developing backend services for an internal tool (website) for workflow management. Tool used (Development tools - H/w, S/w): Java, Spring Boot Framework, Camunda BPMN Engine Objectives of the project: Develop a tool for workflow management for business processes internal to the firm. Major Learning Outcomes: Backend website development Details of Papers/patents: Brief Description of working environment, expectations from the company: The project alotted varies depending on the team. The workload is comfortable and there are enough learning opportunities. The work environment and infrastructure is good. Academic courses relevant to the project: Object Oriented Programming	2019- 20- sem1
JP Morgan Chase - Technology , Bangalore	Full stack development, Automation using Selenium, Performance and Load Testing, Spark Machine Learning Tool used (Development tools - H/w, S/w): Jmeter, Test complete, Bit bucket, Jenkins Objectives of the project: 1. Delelopment of a Screen comparison tool to comapre the differences between two different environment of same web page and highlight the chages with red rectangles. 2. To create a Testframe work where we can perform Load testing of different pages. Major Learning Outcomes:  Java, Selenium, Spring boot, ReactJs, Websockets, Jmeter, Load Runner, Spark Machine Learning, Automation of UI testing Details of Papers/patents: Brief Description of working environment, expectations from the company: Environment is good people are helpful. Time is flexible. Mostly you can expect work related to Full stack development and Data base Management system. There are few project on advanced technologies like Big data and Machine Learning but these projects are few and it depends in which team you are since all the teams doesn't have these projects. Academic courses relevant to the project: Object Oriented Programming, DBMS, Artificial Intelligence and Machine Learning Bangalore Student	2019- 20- sem1
JP Morgan Chase & Co.	The work was based on software development mainly. We got to learn and understand complete cycle from brainstorming, developing to deploying the application. Tool used (Development tools - H/w, S/w): SpringBoot framework, JavaScript, AngularJS, React, JQuery, ElasticSearch, Pitest, SQL Objectives of the project: Develop an application to manage the content (articles) and provide intelligent search for the users Major Learning Outcomes: Got technical and functional understanding of how things work in practical scenario Name: Uday Sankar Y (2015AAPS0236H)	2018- 19- sem1

Company Experience Year

My role in the company is to analyze, report on the operation errors the teams commit across the 14

locations in Asia-Pacific. Further work in co-ordination with Ops managers for the implementation of preventive actions to avoid similar errors in the future which helps for a smoother client experience. The whole process is done on the basis of financial rules and regulations of each economy. Emphasis is given on Compliance requirements and Risk mitigation throughout the whole process with privacy as the key. Another project is on the monthly analysis on the FX statistics across APAC countries and report to senior management. I am also responsible for making out inferences on the transaction data on a daily basis and suggest trends on which kind of transactions are facing issues while processing, by looking at various factors to the senior management. My role in the company is to analyze, report on the operation errors the teams commit across the 14 locations in Asia-Pacific. Further work in co-ordination with Ops managers for the implementation of preventive actions to avoid similar errors in the future, which helps for a smoother client experience. The whole process is done on the basis of financial rules and regulations of each economy. Emphasis is given on Compliance requirements and Risk mitigation throughout the whole process with privacy as the key. Another project is on the monthly analysis on the FX statistics across APAC countries and report to senior management. I am also responsible for making out inferences on the transaction data on a daily basis and suggest trends on which kind of transactions are facing issues while processing by looking at various factors, to the senior management. Tool used (Development tools - H/w, S/w): Excel, Visual Basic for Applications, PowerPoint, Tableau, Company internal software Objectives of the project: 1. Monitor all the operations errors being committed. 2. Monitor/Analyze all the production incidents being committed. 3. Analyze the Foreign Exchange statistics. 4. Client Monitoring. 5. Queue monitoring of Korea transaction queue. Major Learning Outcomes: 1. Communication is a key learning as I talk to people from 14 locations across Asia-Pacific, each having their own accents. Also, it involves me communicating with everyone in the corporate ladder from team members till managing Directors across various spheres of life, location and age. 2. Detailed understanding of financial processes end to end i.e. how a transaction goes from the client to its completion. I am now well versed with the terminology used in my LOB. I am well equipped with the legal and professional knowledge that is required when dealing with sensitive and critical data which has to be kept in accordance with client privacy. 3. I am exposed to the senior management almost on a daily basis which has helped me learn and develop the best corporate and professional experience through this internship. This has helped me approach a problem with a different perspective and to take up an initiative to solve one. This has been a great opportunity to work at such a prestigious organization and learn from the very corporate elite. Brief Description of working environment, expectations from the company: The working environment is very professional as expected from the largest commercial bank in America. In the same way they make sure the interns are well educated on the processed before diving into the projects. Academic courses relevant to the project: Principles of Economics, Fundamentals of Finance and Accounting, Technical Report Writing Name: Parth Dhingra (2015ABPS0872P) Tool used (Development tools - H/w, S/w): Tableau, Excel, PowerPoint Objectives of the project: Gauging Efficiency of BOT Throughput across various business functions in Client Account Services and creating an efficient framework for BOT issues resolution Major Learning Outcomes: 1-I got the detailed understanding of a financial institution with end to end process of how an account is opened, maintained and closed. I also got the legal and professional knowledge that is required when dealing with sensitive and critical data which has to be kept in accordance with client privacy. 2-1 learnt strategic BOT data analysis based on No. of In Scope requests processed, failed, FTE saves, UPT delivered per business function. 3- During my internship, I got exposed to business dynamics, partnered with Ops and Tech teams to prioritize and resolve BOT issues and created synergy between teams. 4- I was able to learn and develop the corporate and professional behavior as I talked with the senior management quite often on a one-to-one basis. Academic courses relevant to the project: Professional Ethics Name: Ganisha Bhawsar (2014B3A80800G) Tool used (Development tools - H/w, S/w): Tableau, Excel VBA, Reflection Workspace, PowerPoint, Objectives of the project: Improve Operational Activities in Cash operations Major Learning Outcomes: Corporate Reporting and analysis Brief Description of working environment, expectations from the company: A great internship program, focused towards full development of a corporate Analyst. Working environment is strictly professional and very positive.

Although a little flexibility is required from the interns in terms of shift timings, this largely depends on the team allocated and your manager. Academic courses relevant to the project: Principles of Management,

JP Morgan Chase & Co.

2018-19sem1

finance Name: Saurav Narula (2014B4A30814P)

Company	Experience	Year
JP Morgan Chase & Co.	To develop and android application which has many employee related services integrated in it like access badge, searching for an employee and his information, booking a meeting room etc. Tool used (Development tools - H/w, S/w): IntelliJ, Android Studio Objectives of the project: To develop an android application along with the backend microservices to be used in the app Major Learning Outcomes: Learnt how to build android application and java spring boot application Academic courses relevant to the project: OOP (as all the work was in JAVA) Name: Praneeth.K (2015AAPS0280H) Tool used (Development tools - H/w, S/w): Excel, Tableau, Share Point Objectives of the project: Metrics Reporting and Performance Improvement Major Learning Outcomes: Project management, Business Syndication Academic courses relevant to the project: Fundamentals of Finance and Accounting, Derivatives of Risk and Management	2018 19- sem1
JP MORGAN CHASE Hyderabad	1. A web-app to provide a user interface and persistent database for a chaos engineering API. Learnings: Spring Boot, Angular, REST-API, oAuth2, Chaos Engineering concepts. 2. Implementation of Ambassador design pattern in Kubernetes to connect to external databases and services using Twemproxy. Learnings: Twemproxy, Distributed Design Patterns in Kubernetes, Kubernetes, Redis. 3. Fault Injection in Kubernetes using shell scripts to test application performance in turbulent conditions. Learnings: Shell Script, Kubernetes, Chaos Monkey, Kube Monkey. Tool used (Development tools - H/w, S/w): Spring Boot, Angular, Kubernetes, Shell Script Objectives of the project: To build confidence in the production environment to withstand turbulence in the system. Major Learning Outcomes: Platform as a service, DevOps, SpringBoot Development Brief Description of working environment, expectations from the company: Quite flexible environment. Good working culture, with friendly and helpful colleagues. Managers are understanding. Have a learning attitude, create good network, and have a good rapport with your team and managers, as PPO are on cards. Academic courses relevant to the project: Object Oriented Programming, Cloud Computing, DBMS Name: Aryan Sahi (2015ABPS0744H)	2018 19- sem1
JP MORGAN CHASE Hyderabad	I am using a data science and a data analytics software known as Alteryx for consolidation and reconciliation of Broker Files. Previously they use to do this work using Excel. I have automated this using Alteryx. My teammates were doing this whole work of consolidation and reconciliation in 1 week/desk. Now with the introduction of this software I have created a template of each and every broker of each desk. So in the future they only have to add their input files and just run the program. The output will be presented in a few seconds and anyone wants to make some changes in input files if they are different from my template they have to add some tools and the output will be displayed. So this software has played an effective role in automating this full work. Meanwhille I am also in touch with teams from London on this project. Due to this initiative only it has saved a lot of manual works and moreover provided a good output too. Alteryx has a stated goal of enabling advanced analytics to be performed by any data worker. In preparation of Broker Data this Alteryx plays a major role. There are lots of tools in Alteryx and using these tools we prepare data. Its just save time. After this we do reconiliation i.e. just a matching between the fields and adding some new data. Tool used (Development tools - H/w, S/w): Data analytics tools like Xceptor, Alteryx and Python. Objectives of the project: The main objective of the project was automating the works which were previoulsy done on excel and onboarding these works on softwares so as to automate and thus reduces the time taken. Also providing a good opportunity to interact with all the upcoming data science softwares in the market. Major Learning Outcomes: I have learnt a lot during this internship. And this 5.5 months in JP Morgan were really amazing and exciting because this firm has Good branding, and provide a lot of opportunities to work in different areas. The most important is good work culture, good work life balance and encouragement for NonBAU activitie	2018 19- sem1

Company	Experience	Year
JP MORGAN CHASE Hyderabad	I was given a ML project to do by myself. It was to build a prediction model to forecast faults. The another project that I did was to develop a web application. The application was for collecting feedback from different teams across the firm. Tool used (Development tools - H/w, S/w): Jupyter Notebook (python, ML), Idea intellij (Web app) Objectives of the project: Fault prediction, feedback application Major Learning Outcomes: ML knowledge, Web development know-how Brief Description of working environment, expectations from the company: Great professional working environment Academic courses relevant to the project: CP, OOP, NNFL Group	2018- 19- sem1
JP Morgan Services - GKN Risk Analytics - Finance ,	Creating a new Test and Control matching algorithm for Consumer Requested Credit Line Strategy.  Analysis and recommendation of a new strategy to decline a certain segment of applicants who are applying for credit line increase. Tool used (Development tools - H/w, S/w): SAS, SQL, Excel, PowerPoint Objectives of the project: Improvement of a technique and analysis of a new strategy Major Learning Outcomes: Understanding of how strategies work Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: None Student	2019- 20- sem1
JP Morgan Services - Global Markets	I worked with the Structural Interest Rate Risk Management team. I was responsible for preparing some weekly reports. My project involved studying the past deposit trends of the bank and forecasting deposit growth rates using market variables like M2 velocity, Fed funds rate and the size of the Fed balance sheet. Apart from this, I also worked on some automation of a few reports to increase efficiency and reduce the turn around time. Tool used (Development tools - H/w, S/w): Excel, VBA, R Objectives of the project: Forecasting / Automation Major Learning Outcomes: Learned some basic machine learning algorithms and their implementation in R, , Functioning of Fixed income securities market Brief Description of working environment, expectations from the company: PS2 has been an overall wonderful experience for me. The kind of exposure I have received during the PS2 program at JP Morgan is unmatched and a very valuable asset at such an early stage in my career. It has also exposed me to the working of the finance sector and the kind of skills required to make a career in the industry. Thereby it has provided me with the opportunity to assess whether this would be the right career path for me. My manager and the members of my team were extremely supportive and were happy to take out time from their busy schedule to clarify my doubts and queries. Academic courses relevant to the project: Financial Management, Derivatives and Risk Management, Financial Risk Analytics and Management Name: Akshat Shah (2015A3PS0235G)	2018- 19- sem1
JP Morgan Services - Global Markets	The Counterparty Risk Group oversees and assesses the risks which arise due to the Financial Counterparties with whom the JP Morgan Asset Management does business. The team is based in three locations- New York, Hong Kong and Mumbai. The team does annual reviews and performs credit analysis of various counterparties with which the business is involved in various trades and assigns credit ratings to them. The team also performs account concentrations to assess the over exposures and investigate the same. The Mumbai tasked with the Annual Credit reviews of the various FIG (Financial Institutions Group) (Banks, Broker-Dealer, Insurance Firms). The credit review process involves qualitative and quantitative checks. Qualitative includes looking at the operating environment, history, strategy, key segments, recent events and management of the entity. In terms of quantitative factors, the profitability (RoE-Return on Equity, RoAReturn on Assets, NIM- Net Interest Margin), asset quality (NPL ratio-Nonperforming loan), liquidity (LCR-Liquidity Coverage Ratio, NSFR- Net Stable Funding Ratio), capitalization (CET1 ratio-Common Equity Tier 1) and funding (LDR-Loan to Deposit ratio) of the entity are assessed. A stress test is performed and the asset quality and capitalization are stressed in low, medium and severe stress situations. We also do a peer analysis to see where the entity ranks alongside its immediate competitors. Tool used (Development tools - H/w, S/W): Excel, Powerpoint, Tableau, Proprietary Software Objectives of the project: Credit Analysis of Financial Institutions Major Learning Outcomes: Analysis of Financial Statements, Knowledge of the Banking Sector and Regulations Brief Description of working environment, expectations from the company: PS 2 overall has been a very positive experience for me. I have learnt a lot of new things and seen the concepts learnt in class come to life in a professional environment. Having had the opportunity to work in a company like JP Morgan at such an early stage of my care	2018- 19- sem1

Company	Experience	Year
JP Morgan Services GKN Banking(CRG)Finance , Mumbai	CRG is the support office to Front End IB of JP Morgan. There are sector teams inclusive of all industries. Work is related to M&As across various industries. The nature of work is dynamic depending on the scope of the deals. As all deals are pretty specific to their domains. We are supposed to deliver tailor made solutions for every deal. Tool used (Development tools - H/w, S/w): Bloomberg and Microsoft Office Objectives of the project: An individual project is allocated to every interns during the end of the period in which one is supposed to work on industry trends, idea generation and valuation for a specific sell side target Major Learning Outcomes: Attention to detail and Analytical mindset Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Work is dynamic and one is expected to receive a wide array of work. Working hours are quite hectic especially during the execution of deals. The company expects the analyst to be eager to learn and perform accordingly Academic courses relevant to the project: Financial Management	2019- 20- sem1
JP Morgan Services GKN Banking(CRG)Finance , Mumbai	Created VBA modules that can be used by all, some updates specific to some teams have slight variations in their backups/ chart types. Hence the BUA type of work involving a specific update of a specific team utilizes these modules with slight variation and certain additional programming for additional tasks if any to make the entire weekly update happen in a single click. Tool used (Development tools - H/w, S/w): VBA, Python Objectives of the project: Automate repititive tasks done by the Bankers in Mumbai office Major Learning Outcomes: Python and VBA Details of Papers/patents: Brief Description of working environment, expectations from the company: In conclusion, the internship has helped me sharpen my skills and gain confidence in them. I also gained industry experience since I got to work with various teams in various sectors and regions. This would certainly be a great help in my career ahead. The current scope of automation in JP Morgan is immense and it would be greatly advantageous to the company to push for large scale modular projects which can help across all teams Academic courses relevant to the project: None Mumbai Student	2019- 20- sem1
JP Morgan Services GRC	Sell sode analyst intern - Equity Research. Financial modelling, newsflow, company financial results Objectives of the project: To get a overall view of how an equity research team works Major Learning Outcomes: Excel, Accuracy, analysis of different segments of a company Academic courses relevant to the project: BAV Research Center, Mumbai Student Name: V Karthik	2018- 19- sem1
JP Morgan Services Pvt. Limited, Global	I was in the FinTech team, supporting the whole of the GKN divison building tools for them. My first project is going to be scaled up and implemented firm-wide and all of the Analysts will be using it in the future. My other projects involved NLG, NLP but I also built a lot of macros and scripts for the GKN team ranging from data extraction to improving the models built by analysts. Tool used (Development tools - H/w, S/w): VBA, Python, R, ML topics like NLG& NLP, advanced Python libraries and programs like cx_freeze, Selenium, as well as many R packages. Objectives of the project: To build various products to save the time and effort of the whole GKN divison. Major Learning Outcomes: I learnt a lot about the world of Finance, building models, the reauirements of analysts. I also learnt how to code very effeciently and build very exciting projects and get constant interactions from upper management. Brief Description of working environment, expectations from the company: This company is a very fast-paced environment the growth is fast but dies out in 2-3 years and people go for their MBA or switch into other teams internally. You wil learn a lot talking and interacting with everybody on your floor. Everybody is open and willing to help you and guide you. Academic courses relevant to the project: C Programming, Object Oriented Programming, Stock Analysis And Portfolio Management, Fundamentals of Finance & Accounting. Name: Apoorv Ranjan (2015A3PS0376H)	2018- 19- sem1
JP Morgan Services Pvt. Limited, Global	These 5 months at JP Morgan as an intern played a crucial in bridging the gap between the theoretical and conceptual knowledge we get at school, and practical one. It helped me understand the workings and organizational culture and behavior in a global level only because JP Morgan is a large MNC, where following the rules and being completely professional is vital. Further, Courses such as Fundamentals of Financial Accounting, Security Analysis and Portfolio Management, Derivatives and Risk Management, and Technical Report Writing have been very useful in grasping things easily. In my free time, I am leaving no opportunity to venture into learning new things from sources on Bloomberg, Morningstar, DataStream and Morgan Markets. This internship has been really exciting and resourceful. I have learnt many things and made some mistakes nevertheless. Tool used (Development tools - H/w, S/w): Bloomberg, Excel Objectives of the project: Equity Research Major Learning Outcomes: Learning and exposure to live products Academic courses relevant to the project: All finance courses Name: FIROZ M S (2015A4PS0429H)	2018- 19- sem1
JP Morgan Services Pvt. Limited, Global	Convertible bond pricing Pitch book preparing Tool used (Development tools - H/w, S/w): Dealogic, factset, excel Objectives of the project: Ppts Major Learning Outcomes: Pricing mechanics Data handling Brief Description of working environment, expectations from the company: Work place is lively and enthralling Academic courses relevant to the project: BAV, FOFA	2018- 19- sem1

Company	Experience	Year
JP Morgan Services-GKN GlobalResearch(GRC)Finance ,	My work was based on equity research and sector analysis. Keeping a track of 17 companies on daily basis. Building financial models for 2 companies from scratch, updating and reorganising existing databases, models and client marketing decks based on the available public information. Preparing weekly and quarterly research reports for companies under coverage. Tool used (Development tools - H/w, S/w): MS-Excel, VBA, MS-Office Objectives of the project: To thoroughly understand the sector dynamics and understand the revenue and growth drivers for companies under coverage thereby providing with inputs for research reports Major Learning Outcomes: Macroeconomic understanding of the sector, understanding of financial statements and analysis, understanding of corporate culture into the field of equity research and application of the content from college curriculum courses. Details of Papers/patents: Brief Description of working environment, expectations from the company: Very professional working environment. Academic courses relevant to the project: Fundamentals of finance & Accounting, Financial Management, Business analysis and Valuation.	2019 20- sem1
JP Morgan Services-GKN GlobalResearch(GRC)Finance ,	Work: I am in an European Equity Research team. We forecast the performance of stocks through valuation. We focus on updating financial models and expectations as earnings releases (Quarterly or Annual) of the companies come out. On the basis of our valuation, we rate the stock as underweight, neutral or overweight. Along with this, there are many daily and weekly notes which we publish. PPO chances: ~60% based on historical figures (depends mainly if there is a vacancy or not) Reach out to me if you have any other query regarding this profile. Tool used (Development tools - H/w, S/w): Advanced Excel, VBA (Beginner level) Objectives of the project: Equity Research: Valuation of companies through financial models Major Learning Outcomes: Understanding of equity research, model forecast, valuation, enhancement of Excel skills and knowledge of the particular market you are working in. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: I'll be here for both of my semesters. Although working hours are long, work environment is good. You can easily reach out to seniors (a lot of BITSians here) if you face any problem. You get to experience the feel of working in Corporate and how to deal with it while maintaining work life balance. Academic courses relevant to the project: Fundamentals of Finance and Accounting (very important), Business Analysis and Valuation, Financial Management, Security Analysis and Portfolio Management, Derivatives and Risk Management	2019 <sup>-</sup> 20- sem1
JP Morgan Services-GKN GlobalResearch(GRC)Finance ,	Creating financial models and updating the models for the quarterly results, publishing notes with recommendations, sourcing data from various sources for clients and regular work. Preparing presentation with sector and company outlooks. Working with associates from across the region to create reports giving macro outlook and company valuation, price targets and company specific risks and rewards. Tool used (Development tools - H/w, S/w): Excel, PowerPoint, Word, VBA, Bloomberg Objectives of the project: Creating financial models for companies and doing due-diligence work to provide recommendations and data for companies Major Learning Outcomes: Deeper understanding of accounting and valuation principles and the sectors you work in. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment relaxed and the people are good and cooperative. Company expects you to know the basics and have professional attitude. Academic courses relevant to the project: FOFA, FM, BAV, DRM	2019 20- sem1
JP Morgan Services-GKN GlobalResearch(GRC)Finance ,	The work involves analysing company financials, performing ratio analysis and financial modeling to give a Rating to a stocks (Buy/hold/sell). The task involved was updating the financials of the companies and maintaining Models. I grabbed the opportunity to learn Visual Basic and make macros to automate certain web scraping tasks for the team Tool used (Development tools - H/w, S/w): Excel, VBA, Bloomberg, Objectives of the project: Equity Research Major Learning Outcomes: Understand the driver and catalysts of stock markets; Financial Modelling and Valuation Details of Papers/patents: Brief Description of working environment, expectations from the company: J P Morgan was a holistically rewarding experience that works to maximize your potential. In Equity Research, we were assigned different teams and sectors. I got a chance to be in the U.S healthcare Distribution and Technology team where I spent the first few weeks going through the industry primers and companies models in our coverage. The work gave me a broad understanding of how the companies functions and what all catalysts and drivers can affect the stock price. Academic courses relevant to the project: Buisness Analysis Valuation, Technical Report Writing, Fundamentals of Financial Accounting	2019 20- sem1

Company	Experience	Year
JP Morgan Services-GKN GlobalResearch(GRC)Finance ,	I am a part of a 4 member team covering European Small Midcap companies. Two of them sit in London and two in Mumbai. We look at Europe as a whole and do not focus on any specific sector like in Equity research. As per our list of monthly deliverables, the team prepares reports which can be weekly, monthly or quarterly. These reports provide our views of the region from a fundamental, valuation and sentiment standpoint. These reports can then be used by investors to understand the market direction better and make investing decisions. In between all of this, you are expected to prepare charts, drafts, screens, run queries for these reports. It involves a lot of Excel, Access work and requires you to have a basic understanding of VBA and SQL. The work hours can be stretched once in a while depending upon deadlines. The work can be a little repetitive at times but there are things you can extract out of this team depending on how sincere and interested you are. Tool used (Development tools - H/w, S/w): Excel, Access, VBA, SQL, Bloomberg Objectives of the project: EMEA Small MidCaps Equity Strategy Major Learning Outcomes: 1. VBA, SQL, Access, Bloomberg (Technology wise). 2. Responsibility, Discipline, Accuracy, Professionalism, Time Management 3. Conducting Fundamental, Valuation, Sentiment Analysis. Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: JP Morgan is one of the biggest names in the Industry. You can expect the working environment to be highly professional and organised. They have a very well laid out internship structure. Colleagues are very friendly and understanding. Academic courses relevant to the project: Finance Courses, MacroEconomics Mumbai Student	2019- 20- sem1
JP Morgan Services-GKN Markets &Treasury Risk- Finance ,	Two categories of work was there. One was a BAU(Business as usual) and the other was a project type work allotted to me. In the BAU part I had to do the daily VaR analysis for the Currencies and Emerging Markets line of business. It gave me a financial Outlook. The other part was the project part which consisted of tool automation. It was based on Python and Object oriented programming. Tool used (Development tools - H/w, S/w): S/w - Microsoft Visual Studio, Excel. Objectives of the project: Daily Report Automation Major Learning Outcomes: Got to learn a lot about tool development on the technical side and financial analysis on the finance side. Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: Academic courses relevant to the project: DRM, MBFM, FINMAN, OOP.	2019- 20- sem1
JP Morgan Services-GKN Markets &Treasury Risk- Finance ,	As a member of team of a Liquidity Risk Oversight team under CTC risk Department, I helped in fast advancements and improvements in work done in various projects. My team manages the firm's capital, balance sheet, liquidity and funding strategy and positions, including short dated and secured funding, debt and capital issuance and buybacks, and liquidity risk management, as well as the company's rating agency relationships and corporate insurance activities. My team is responsible for Firmwide Liquidity Risk and Interest Rate Risk Management. I had a significant contribution in a project taken my manager which will be presented to head of department Tool used (Development tools - H/w, S/w): Bloomberg Terminal, Excel Objectives of the project: Liquidity and Interest rate risk impact analysis on JP Morgan business by major stressed sectors & economy outlook of India Major Learning Outcomes: Data Analytics Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: none	2019- 20- sem1
JP Morgan Services-GKN Markets &Treasury Risk- Finance ,	Conducted a project on Negative Yielding Debt and its impact on the banking, pension and insurance sector. As more and more of the world's outstanding debt turns negative yielding, it is important to assess the impacts of this on various financial institutions. The purpose of this study is to assess changes in asset allocation and impact on earnings in various industries that are exposed to negative rates, namely banking, pension and insurance firms. The study also examines the effectiveness of negative interest rate policy and whether it has actually achieved the objectives central banks hoped it would. Tool used (Development tools - H/w, S/w): VBA Objectives of the project: To assess the impact of negative rates on the banking, pension and insurance sector. Major Learning Outcomes: • Learnt about the influence of geopolitical events on market movements and how the market is driven by these. • Learnt about various risk sensitivities like VaR, DV01, BPV, CS01. • Understood the concept of negative yields and negative interest rate poli Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Derivatives and Risk Management, Security Analysis and Portfolio Management	2019- 20- sem1
JP Morgan Services-GKN Markets &Treasury Risk- Finance ,	Implementation of FRTB rules and understanding different methodology used to calculate capital charge for assets on firm books. Using different methodology to explain the movement in capital charge week on week and explain the reason of outliers. Tool used (Development tools - H/w, S/w): S/w: Python, Excel and Tableau Objectives of the project: Automation of weekly analysis of strategic capital numbers and implementation of FRTB rules Major Learning Outcomes: Firm grip over python, Excel, Tableau and Market Risk concepts Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: Derivatives and Risk management, Financial Engineering, Computer programming, Probability and Statistics Student	2019- 20- sem1

Company	Experience	Year
JP Morgan Services-GKN Markets(GMG)Finance , Mumbai	The Global Markets Group (GMG) of the company works on the pricing and pitching of all kinds of trades that happen all across the world. This involves the creation of different kinds of trade products for their clients as well as their pricing and sales. The work in the Markets group revolves around the creation of such products which would appeal to the different risk behavioural clients. The next important step comes to placing a competitive price for their products and reaching out to a large number of clients all across the globe. I have worked on both the index creation as well as the pricing part initially but later my work shifted onto primarily focusing on the pricing side. The aim of the project was to automate the pricing process that occurs on a daily basis in large amounts in Markets. Tool used (Development tools - H/w, S/w): VBA, Python, Advanced Excel Objectives of the project: Automation of Pricing of Various Trade Products Major Learning Outcomes: Coding in VBA and Python, Knowledge about the different structured products trading around the world. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is very friendly. Everyone is always willing to help you with any doubts about the work. Academic courses relevant to the project: Derivatives and Risk Management (DRM), Security Analysis and Portfolio Management (SAPM)	2019- 20- sem1
JP Morgan Services-GKN Markets(GMG)Finance , Mumbai	Work done mostly involved understanding and developing codes for new indices(based on client agreed guidelines) to facilitate upcoming trades across geographies. Tool used (Development tools - H/w, S/w): Python based software, Microsoft Excel Objectives of the project: Algorithmic Trading Strategies and Index Structuring Major Learning Outcomes: Understanding of how indices are structured and worked on, delivering work on tight timelines, working and gaining understanding different products that the company offers. Details of Papers/patents: - Brief Description of working environment, expectations from the company: People in the company and department are extremely friendly and helpful. Most of the employees are graduates from premier engineering colleges of India which gives exposure to working in competitive work space. Academic courses relevant to the project: Derivatives and Risk Management, Security Analysis and Portfolio Management Mumbai Student	2019- 20- sem1
JP Morgan Services-GKN Quantitative Research- Fintech ,	I worked on Propritery JPMS software to calculate capital requirements under FRTB Internal Models approach Tool used (Development tools - H/w, S/w): Python Objectives of the project: Calculate capital requirements Major Learning Outcomes: Python, Databases Details of Papers/patents: Brief Description of working environment, expectations from the company: Very good working environment. Above expectations. Academic courses relevant to the project: Object Oriented Programming	2019- 20- sem1
JP Morgan Services-GKN Quantitative Research- Fintech ,	Worked on feature selection using Zero Norm and Sequential Monte Carlo. Performed unit-testing and profiling of proprietary trade scheduling tool. Tool used (Development tools - H/w, S/w): Python, Q, R Objectives of the project: Feature selection using Zero Norm and Sequential Monte Carlo Major Learning Outcomes: Sequential Monte Carlo, Learnt Python, Multiprocessing, multithreading, feature selection Details of Papers/patents: None Brief Description of working environment, expectations from the company: Very collaborative and friendly. People are very smart and approachable. All expectations met. Academic courses relevant to the project: Machine Learning, Artificial Intelligence, Statistical inference and application	2019- 20- sem1
JP Morgan Services-GKN Quantitative Research- Fintech ,	I am in the Wholesale Credit Team of the Quantitative Research and helped to find the Risk associated of a portfolio from the perspective of two different models for risk estimation. Tool used (Development tools - H/w, S/w): Spyder and Python, Excel, Word, IntelliJ Objectives of the project: Calculate Credit Risk for a specific portfolio Major Learning Outcomes: Pandas and Finance Knowledge Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment is very good, people are friendly and helpful. Academic courses relevant to the project: Data Mining Student	2019- 20- sem1
JP MorganServices	I mainly worked to produce to two tools one was daily market data update pack which can be used to perceive potential liquidity risk to firm and the other was weekly risk pack update it was an automated tool to produce summary of major moves within Asia pacific region. Besides I worked on analysis of repo market of China, Korea, South Africa, I also worked on few automation projects Tool used (Development tools - H/w, S/w): Tableau, MS excel, R programming, In house software Objectives of the project: To better forecast the changes in liqudity and to ease the processes by automation Major Learning Outcomes: 1. Liquidity Risk and its management in detail 2. Functioning of various departments of a bank 3. Got good understanding of repo and fx markets Academic courses relevant to the project: Financial risk analytics and management, DRM, SAPM Faculty Name: Prof. Krishnamurthy Bindumadhavan	2018- 19- sem1

Company	Experience	Year
JPMC - CIB Ops	I was put in the projects team in which we had to optimize and automate the different processes and banking operations using a variety of tools. I did not have to do any boring work on excel, and even though the projects at some point of time become monotonous, if you are able to show your manager that you are capable of delivering big projects, he will assign you some very interesting ones that will pose a challenge to you. Major Learning Outcomes: Business designing and solutioning, understanding the basic outlay of how such a huge bank functions and advancement of technical and analytic skills were the 3 major takeaways from this PS. Brief Description of working environment, expectations from the company: Luckily I was put in a team which was very welcoming. There was no age discrimination; they were always ready to help me out whenever I had a problem. It was a pleasant experience overall. Name: Himanshu Todwal	2018- 19- sem1
JPMC - CIB Ops	I have worked closely with the Business Transformation team. There has been a lot going out in terms of Automation in the Industry. I was involved in identifying the potential Opportunities of Automation, understanding various lines of businesses and analyzing the sequence of operations throughout the organization. I was required to develop models leveraging concepts of Assembly Line used in engineering and designing a map for various applications used in the firm to optimize the complete processing of data. Strategic implementation of various methods to deduce a basic code for transforming a general process into an application comprised of my initial project which gradually shaped into a Global task involving teams from various parts of the country and became a core of Project Management. In a nut shell, it was a combination of Technology and Management. Tool used (Development tools - H/w, S/w): Microsoft Excel, Microsoft Powerpoint (Extensive use), Company licensed softwares Objectives of the project: To Identify potential Automation opportunities and determine the optimum solution (Strategic/Robotics) minimizing the time required and maximizing the return on Investments Major Learning Outcomes: Robust Governance Models, Teamwork, Project Management, Automation on tools, Global Communication, Networking, Stakeholder Management Brief Description of working environment, expectations from the company: The expectation is to learn and practice on whatever task is being assigned to you as a training exercise in the initial one month. Thereafter, the person needs to understand the dynamics of the organization i.e. (s)he needs to be vigilant of what is happening in a particular project of the team and in the organization as a whole. (S)he needs to understand the system and curriculum being very particular about the communication and accountability. (S)he must be aware of the impact any word said by him/her can create henceforth. It will be easy to get comfortable with whatever technical tools are in the space but, ke	2018- 19- sem1
JPMC - CIB Ops	Banking operations make sure our processes and transactions are executed correctly, which minimizing risk and maximizing quality of service. Our job is to make sure that end to end transactions are processed within due time for corporate clients of JP Morgan Chase and Company inclusive of any FX investments for delivering the best experience and client priority in banking across the Asia – Pacific Region. Any delay or error in the conveyance of information or processing it directly leads to a real time financial and reputational loss for the company, which makes the role of the team more crucial. My role in the company is to identify daily tasks involved in the whole process and increase efficiency by automating such tasks using Software skills in Visual Basic Applications and tools like Tableau to minimize human errors and meeting the client's requirements in a smooth way within due time. The whole process is done on the basis of financial rules and regulations of each economy. I am also responsible for making out inferences on the automated data on a daily basis and suggest them to the senior management so that it is put into production. Working at such a prestigious organization has helped me gain the best corporate exposure and develop a professional attitude. I have had the opportunity to work under the corporate elite and inspire from them. Tool used (Development tools - H/w, S/w): MS Office, Qlikview, VBA and Tableau Objectives of the project: Enhancing end to end client experience Major Learning Outcomes: Transaction life cycle, Presentation skills and soft skills Brief Description of working environment, expectations from the company: Fun work environment, Fair amount of interaction with senior management and high expectations from us because of the background we come from. Name: Shivam Jindal (2015ABPS656P)	2018- 19- sem1

Company	Experience	Year
JPMC - CIB Ops	Automation allows me to free up a lot of time that would have been used for manual work. Worked on different problem statements that may arise any time in an operations line. Detailed understanding of a financial institution with end to end process of how a transaction goes from the client to its completion Tool used (Development tools - H/w, S/w): VBA Excel, Xceptor, Qlikview. Objectives of the project: • Identification of existing reporting and Management Information Systems that can be automated using the licensed web tool - Xceptor. • Reporting deviations in site segregation reports of all markets across the four Global Service centres and analyze the trends in them to mitigate risk and errors. • Status wise segregation of Pending Payments on an hourly basis so that concerned departments. • Automation of Staff Productivity reports, overtime and leave tracking systems. Major Learning Outcomes: This has helped me develop skills that deliver direct results statistically. This has encouraged strategical thinking directly improving efficiency and reducing manual errors. This has developed in me an attitude that requires me to be alert, swift, detailed and deliver the best results within the due time, with the latest trends and technology that can be used to make systems more efficient. Name: Kush Kanwar	2018- 19- sem1
JPMC - CIB Ops	Data Anaylsis, Transaction lifecycle Tool used (Development tools - H/w, S/w): Qlikview, Excel, PowerPoint Objectives of the project: Efficient task management, diligent monitoring of transaction queue, creating real time dashboard Major Learning Outcomes: Qlikview, Transaction lifecycle, payment processing Academic courses relevant to the project: Fundamentals of Finance and Accounting	2018- 19- sem1
JPMC - Technology , Mumbai	KUBERNETES( Container orchestration technology for cloud native applications), Private JPMorgan cloud, Springboot JAVA. Tool used (Development tools - H/w, S/w): JAVA SPRINGBOOT, REACT REDUX, KUBERNETES, JSON, XML, INTELLIJ, LINUX Objectives of the project: Build a Java springboot application and deployment on cloud as well as kubernetes cloud. Major Learning Outcomes: Kubernetes, Springboot framework and libraries widely used and adopted by major industries, Details of Papers/patents: Brief Description of working environment, expectations from the company: Good culture and helpful team. Academic courses relevant to the project: OOP, OS	2019- 20- sem1
JPMC - Technology , Mumbai	I have been involved in two projects during my internship. The first project is about building a dashboard using R shiny which provides an interactive graphical representation of real time updates of various accounts and userbanks. The dashboard is also equipped with advanced features like drill-down, hovering events, customize plots etc. Moreover, in the later half of my tenure, I have also included prediction part for detecting the failures possibility of any execution. The second project is related to authentication of a self-learning chatbot by adding entitlement service to the project. Tool used (Development tools - H/w, S/w): R, Python, Postman, IntelliJ, Oracle SQL developer Objectives of the project: Building dashboard for graphical representation of data using R Shiny and implementation of machine learning algorithm for predictive analysis of NAV fund Major Learning Outcomes: It has been a great experience as both the projects offer a lot to learn. It helps me in improving my technical skills a lot and also makes me understand how different application and various technologies integrate to work at a commercial level. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses relevant to the project: OOP, OS, DBMS, NNFL.	2019- 20- sem1
JPMC - Technology , Mumbai	I was assigned a task to work on a application which has huge amount of lines of code which was uncalled for. So, I was assigned to understand the flow and remove all the unnecessary code for the application to optimize and fixing the bugs in the both backend and Front end of the application. Also to increase the test coverage to more than 50% which includes fixing the old ones which uses some dependency from the net or the database and also writing new ones. I completed the task successfully. After that I was assigned some smaller tasks and POC for trying out different databases for the application including cloud database as well. The POC also used Django Framework. Also worked on creating a view for data display, which used Python and perl scripts. Tool used (Development tools - H/w, S/w): Java, Spring Framework, Python, Django, Junit and Mockito Objectives of the project: Fixing the Application. Major Learning Outcomes: Spring Framework, Django Framework. Culture of Corporate world. Details of Papers/patents: Brief Description of working environment, expectations from the company: Everyone is really helpful there. Good place to work even if you do not have prior experience with coding. Academic courses relevant to the project: Object Oriented Programming	2019- 20- sem1

Company	Experience	Year
JPMC - Technology , Mumbai	I was a part of 2 major projects, and a couple of minor ones. The first project involved developing multi-tab dashboard using R that collated data from a dozen independent sources and presented the output information in the form of data visualizations with the goal of communicating necessary insights to senior executives. The second project on the other hand involved full stack web development with Angular JS, HTML, CSS frontend/ Java(Spring Boot) backend. Other minor projects involved data analysis using tableau or automation of existing processes. Tool used (Development tools - H/w, S/w): Java/Angular JS/HTML/SQL for the web development project + R/Python for dashboard design Objectives of the project: Software Development & Dashboard Design Major Learning Outcomes: Software Development & Dashboard Design Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Working conditions are awesome, flexible working hours and you get a lot of added perks such as free transport services and sodexo cards. JPMC offers a wide variety of projects suited to your resume and profile, and you have to option to switch if you don't like the one assigned. Team members are always happy to help you out if you get stuck. Academic courses relevant to the project: DSA, OOP, DBMS, Foundations of Data Science	2019- 20- sem1
JPMC - Technology , Mumbai	Building an Integration Test Suite which automates browser testing and validates data with another instance of the same application using Selenium Webdriver. Tool used (Development tools - H/w, S/w): Gherkin, Cucumber, Selenium Webdriver Js, TypeScript, Node.js, react.js, VS Code, jules, jenkins, groovy Objectives of the project: Building an Integration Test Suite for Data Validation Major Learning Outcomes: Understanding the complete workflow of a firm and it's functioning. Gaining a business perspective for a project. Improving certain soft skills and confidence while having 1-1 discussions with senior executives. Details of Papers/patents: Brief Description of working environment, expectations from the company: The company provides good learning and a friendly atmosphere. You are expected to finish your work before the deadline. They want us to be inquisitive and be able to learn from our mistakes. Academic courses relevant to the project: Object Oriented Programming, Data Structures & Algorithms Pune Student	2019- 20- sem1
JPMC CIB Operations - Robotics Automation, Bangalore	Automation of financial processes to increase efficiency and decreasing costs. Tools used (Development tools - H/w, S/w): Automation Anywhere, Xceptor Objectives of the project: To decrease the dependence on manual labour Outcomes of the project: The project decreased human intervention in processes Major Learning Outcomes: Process Automation Brief Description of working environment, expectations from the company: Decent working. environment. Monotonous work. Corporate culture. Academic courses relevant to the project: C Programming	2017- 18- sem1
JPMC CIB Operations - Robotics Automation, Bangalore	Robotics Process and Automation of Trades Tools used (Development tools - H/w, S/w): MS Excel, Other 3rd Party Softwares Objectives of the project: To automate and reconcile the trade activities Outcomes of the project: Projects were successfully automated and reconciled. Major Learning Outcomes: Corporate Culture, Automation scripting Details of papers/patents: CLassfied Brief Description of working environment, expectations from the company: Decent working. environment. Monotonous work. Corporate culture.	2017- 18- sem1
JPMC CIB Operations - Robotics Automation, Bangalore	On a third Party Software tool, created Input Data Formats to extract required data from files, Message processors to process the data and Output Data Formats to get the desired outputs. And als created Translation Table to look up data for Imput Dta Formats if required. Tools used (Development tools - H/w, S/w): Xceptor . Automation anywhere. Objectives of the project: To Automate the Manual processing of files. Outcomes of the project: Fast and accurate data processing Major Learning Outcomes: Using Xceptor Brief Description of working environment, expectations from the company: Working at JPMC has been a pleasant experience with a lot of people supporting you and helping you at every stage of the project and they have been patient enough to engage with us and clear our doubts. Company expects us to work with our full potential and focus there by contributing to the development of the firm. Academic courses relevant to the project: CProgramming Student	2017- 18- sem1
JPMC CIB Operations - Robotics Automation, Mumbai	We were involved with the Robotics Division at JPMC. Our work was focused on maintaining and making the Bots which were being used to automate the repetitive processes that the Operations division of the bank. Tools used (Development tools - H/w, S/w): Automation Anywhere Python VBSript Objectives of the project: To increase the service efficiency by automating processes. Outcomes of the project: Worked on 6 processes and on boarded their security to the in house vault. Major Learning Outcomes: To collaborate with teams of people. Handling of automation software's. Brief Description of working environment, expectations from the company: Great working environment and very collaborative culture focused on learning. Academic courses relevant to the project:CP	2017- 18- sem1

Company	Experience	Year
JPMC CIB Operations - Robotics Automation, Mumbai	My PS2 was in robotics department at JPMC Mumbai. Got exposure to tools like Xceptor, Automation Anywhere. I worked mostly on Xceptor. Xceptor is a tool which has been introduced at JPMC to automate logic base processes in Excel Sheets. It is slowly replacing VBS because it is more robust than VBScript. Tools used (Development tools - H/w, S/w): Xceptor, Automation Anywhere, VBScript Objectives of the project: Automating logic based processes Outcomes of the project: Reducing the number of full time employees required to do certain tasks by automating the process Major Learning Outcomes: Xceptor, Automation anywhere Brief Description of working environment, expectations from the company: We were not treated as mere interns at JPMC and were handed projects similar to full time employees. People here are very helpful specially our BITS seniors who are now working full time here. Academic courses relevant to the project: None	2017- 18- sem1
JPMC CIB Operations - Robotics Automation, Mumbai	My Primary role was of Access Manager, although i did work with Developers too for exploring myself and boosting up my developing skills. In Access Management Team, our basic task was to Provision System IDs as required by Teams for their current projects or coming up projects. We were also responsible for troubleshooting access issues as well for raising Application Specific access. In developing team, i did automate a process for Change Management Team. I did work for around 1 week with Development team to complete this project. Tools used (Development tools - H/w, S/w): Automation Anywhere Tool, WIN Automation Tool Objectives of the project: To provision access and its troubleshooting as required. Outcomes of the project: I did automate several process of my Team also in which i worked to save manual Efforts. We also did manage a Share Point where we kept all access with systems IDs ready for all 2018 Projects. So that we are not short of time for Project to go live at the last moment. Major Learning Outcomes: 1. Automation of Several Process Using Tool Automation Anywhere Tool. 2. How Accesses and Security works in Bank like JP Morgan. Brief Description of working environment, expectations from the company: Overall it was quite good and satisfactory working environment or i should say a lot better then what expected. I did get a lot to develop in my personality as well as Academics. I did get to learn Professionalism, Decision Making during critical time and Time Management the most important factor. It also helped me teaching a lot along with how to talk to senior people, way of interacting with senior people during meetings or in Person. Academic courses relevant to the project: None	2017- 18- sem1
JPMC CIB Operations - Robotics Automation, Mumbai	Coded and upgraded bots using Automation Anywhere software for the firm, for use globally. These bots were used to replace the routine tasks previously done slowly and inefficiently buy numerous human operators. We began by coding a simple bot to raise security clearances for new hires, so that our managers would not have to manually raise it for any future recruits after us. Then, we worked for a month on an ongoing project to improve password protection in all bots. Then, we worked on a project to upgrade bots to make full use of, and to be compatible with, the newer version of Automation Anywhere. Lastly, we worked on a project to improve disaster recovery. Tools used (Development tools - H/w, S/w): The software tool used was the trademark Automation Anywhere. We also used Xceptor for a brief period, to manipulate Excel files in automation. Objectives of the project: To improve the versatility and capability of the robotics department to better ensure the firm's dependency on, as well as ability to rely on, the robotics department to speed up and cheapen their work. Outcomes of the project: We coded a few basic bots and upgraded or improved password protection features for about 15 bots/processes per intern. Major Learning Outcomes: The structure and organisation of project development in an IT firm, and the practical applications of many advises previously given with regards to coding and coding ettiqette (such as naming of variables etc). I also learned how to work as a team, and how to approach the user/client side with patience and professionalism, code in such a way that it is user friendly, enable them to understand and use the coded final product, and get my work done. Brief Description of working environment, expectations from the company: The company offered amazing transport services, fantastic healthcare facilities etc, but seems to have become saturated in the robotics sector, where growth is stalling (careers wise) and recruitment is dropping. Furthermore, the work is irregular and grossly overt	2017- 18- sem1

Company	Experience	Year
JPMC CIB Tech, Bangalore	Fetch, parse and send the market performance stats reports to the kdb server and later provide analytics for the clients to work on. Tool used (Development tools - H/w, S/w): q/kdb+, java (apache.poi, Jsch, EWS), python3 scripting, YAML Objectives of the project: Fetch, parse and send the market performance stats reports to the kdb server and later provide analytics for the clients to work on. Major Learning Outcomes: Ticker plants, Time Series, Market Products Brief Description of working environment, expectations from the company: Very chilled environment. You are expected to finish your work before deadline.People are very friendly and helpful. They want us to be inquisitive and be able to learn from our mistakes. Academic courses relevant to the project: Intro to computer programming, OS, OOP, DSA, DBA, Computer Networks, Software engineering Pune	2018- 19- sem1
Knorr-Bremse Technology Center India Private Limited ,	The project assigned to me was to develop a privacy protection tool. Company uses ADAS systems which consists of several cameras and other sensors on vehicles. These cameras captures private information like faces of pedestrians and licence plates of people around it. The goal was to develop a tool that detects faces and number plates and blur them using deep learning and neural networks. Tool used (Development tools - H/w, S/w): S/w: Pycharm, Anaconda, Darknet framework, YOLO models H/w: GPU(Nvidia GTX 1060 6GB) Objectives of the project: Develop a privacy protection tool Major Learning Outcomes: Learnt about agile methodology of working. Learnt about market needs and expectations in my specific field of project. Experience to develop a deep learning and neural network based tool. Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: The working environment at Knorr-Bremse was good. There were no deadline as such to complete your goal. They let you decide goals and the time to achieve them. The company expected to be interested in particular field and will assign a project according to that. They give you time to learn the basics before working on the project. Academic courses relevant to the project: OOP, DIP(Digital Image processing) Online courses: Coursera Courses on deep learning and AI. Convolutional Neural Networks.	2019- 20- sem1
Knorr-Bremse Technology Center India Private Limited ,	I worked on development of a software named EnSeGi which automates ADAS testing and Python Toolchain Migration from Python 2.7 to Python 3.7 Tool used (Development tools - H/w, S/w): PyCharm IDE and Excel VBA Objectives of the project: To automate ADAS testing Major Learning Outcomes: Core Python Programming skills and software development in Python Details of Papers/patents: Not applicable Brief Description of working environment, expectations from the company: The work environment was very encouraging, mentors were supportive and faculty in-charge was also very supportive Academic courses relevant to the project: Computer Programming Brief write-up on PS-II station: KocharTech, started in 2003, specializes in digitally transforming business processes by designing disruptive solutions using AI and Machine Learning technologies. KocharTech has been powering some of the Fortune 500 companies, MNCs as well as Unicorn Start-ups across Asia, Africa, Europe and the Middle East. Students have worked on projects in computer vision domain where students have to develop machine learning and AI based approaches to monitor real time footfall in a commercial outlet. Organization prefer to have students who are good researchers, can work independently with minimum mentorship and have excellent programming skills. Student	2019- 20- sem1
Knorr-Bremse Technology Center India,	Project 1: Developing a tool to remove private information form videos using deep learning and image processing. Project 2: Developing a tool to automate the process of test case evaluation on data generated after testing and simulations. Tool used (Development tools - H/w, S/w): Python, Keras, PyQt5, antlr4, OpenCV Objectives of the project: Project 1: Blur out private info from videos. Project 2: automate test case evaluation process Major Learning Outcomes: Practical application of image processing, deep learning. Developing a GUI. Developing a industry level software. Better command on python. Brief Description of working environment, expectations from the company: Good working environment. Do not expect something like a proper IT company as it is a Mechanical company at its core. High chances of PPO if you show decent working behavior but the CTC provided is very low. Academic courses relevant to the project: Machine Learning, Deep Learning, Image Processing, DBMS	2018- 19- sem1
Kochar Tech , Gurgaon	Created a real-time footfall monitoring system that was designed according to the principles of economically viable, versatile, real-time execution. Deployed my project across several commercial locations of a client with reasonable success. Tool used (Development tools - H/w, S/w): python and related libraries, shinobiCE, dlib, spyder, anydesk Objectives of the project: 1. Record and analyze periodic footfall in a commercial location 2. Create data optimum for analyses that benefit the client Major Learning Outcomes: Knowledge of several image-processing techniques, object detection algorithms, client exposure. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment was very open, approachable. I had the opportunity to work with several high-level executives as well as the CEO. The organisation has several people with immense knowledge and a knack for learning. If you have enough drive for your project, you will be given any and every resource you could possibly require. An incredible learning experience overall. Academic courses relevant to the project: Data Science, Image processing	2019- 20- sem1

Company	Experience	Year
Kochar Tech , Gurgaon	I worked with the IT team of the company. Worked on different Machine Learning and Computer Vision projects. Tool used (Development tools - H/w, S/w): NVIDIA Jetson Nano Developer Kit, Orange Pi 3, GPU 1080ti, 3D IP cameras, Python, JSON Objectives of the project: The task was to make an automated footfall counting system which avoids multiple counts for the same person by re-identifying the person and differentiating staffs from customers. Major Learning Outcomes: Proficiency in Python, Building ML models Details of Papers/patents: Brief Description of working environment, expectations from the company: In a startup you will be given plenty of work and will get to grow as a coder. KocharTech being a startup company is currently expanding in IT Department. KocharTech is currently working on different Data Science projects. Company's working hours are flexible. It's just that if you are completing your day to day work and making a progress in your project they will not say a thing to you if you come on time or not. Academic courses relevant to the project: Software Engineering Information Retrieval Probability and Statistics Brief write-up on PS-II station: 1.Kristal.AI provide investors with a platform which will help them hone their money-management skills with the best of technology and human acumen. Course Requirements: 1. Courses of OOP(Object Oriented Programming), 2. OS(Operating Systems), 3. DSA(Data Structures and Algorithms) 4. CP(C Programming) 5. Probability and Statistics 6. Linear algebra 7. Neural Networks and Fuzzy logic. 8. Probability and Statistics II Student Skillset: 1. Hands on experience on OOP for all interested students. 2. Backend development using Spring Boot and Java. Student	2019 20- sem1
Kristal.AI	Android APP development, Data Scraping, ML Latent Dirichlet Allocation, AWS Rekognition were the projects taken up. Tool used (Development tools - H/w, S/w): Android Studio, JAVA IDE(Eclipse), Python(Jupyter) Objectives of the project: Data Scraping of various Financial Documents and reports for Financial Analysis, Data categorisation using Latent Dirichlet Allocation, Video recognotion for different faces using AWS Rekognition Major Learning Outcomes: Android Application Development was successfully learned and implemented. Working of different Development and IT softwares like Jupyter, Eclipse, etc. Knowledge of the Financial aspects of the company was also gained. Brief Description of working environment, expectations from the company: The overall company interaction is very good. People are very friendly and ready to help. The projects assigned help you to gain knowledge of various fields. Academic courses relevant to the project: OOP, OS, DSA	2018 19- sem1
Kristal.AI , Bangalore	I did 2 projects. Both were based on Quantitative Finance. First was creating a risk management system.  Second was to create index tracking portfolio. Tool used (Development tools - H/w, S/w): Python, R,  Bloomberg Objectives of the project: Quantative Finance Major Learning Outcomes: Quants and Data  Science Details of Papers/patents: Brief Description of working environment, expectations from the  company: Great place to work. A lot of learning oppurtunities. Academic courses relevant to the project:  DRM, SAPM, FinE	2019 20- sem1
Kristal.AI , Bangalore	Comparing Databases, Spring Cloud, Spark Tool used (Development tools - H/w, S/w): Postgres, TimescaleDB, Spring Boot, Apache Tomcat, Apache Spark Objectives of the project: Backend Development Major Learning Outcomes: SQL, Backend Systems, Big Data Processing using Apache Spark Details of Papers/patents: Brief Description of working environment, expectations from the company: Amazing Working Environment, very friendly people. Academic courses relevant to the project: OOP, DBMS	2019 20- sem1
Kristal.AI , Bangalore	1] Developed Kristal.Al's Growth algorithm, worked on Kristal.ai's Asset Preservation algorithm and also built a REST API around it. 2] Reduced the bootstrapping time from 270 seconds to 15 seconds which gave us leeway to incorporate implied volatility into the bootstraps leading to better predictions. 3] Developed a Sentiment Analysis Model for Financial News data using BERT which led to a 26% improvement in accuracy over the previously used model. 4] Built an article summarization system using SummaRuNNer which will enable Kristal to push news article headline as well as a brief summary of the article to the customers leading to better user experience. Tool used (Development tools - H/w, S/w): BERT, Pandas etc Objectives of the project: 1] Develop an efficient portfolio optimization algorithm. 2] Develop a sentiment analysis model for financial news. Major Learning Outcomes: Learnt about the finance industry, algorithmic trading, non-convex optimization techniques and BERT. Details of Papers/patents: Brief Description of working environment, expectations from the company: Excellent work and people, but PPO CTC is low. Academic courses relevant to the project: Maths-II, Probability and Statistics, Optimization, Neural Networks and Fuzzy Logic, Machine Learning Student	2019 20- sem1
Kruzr Mobility Technology Solutions Pvt. Ltd. , Bangalore	Worked as Android application developer and in development of "KRUZR" application. Tool used (Development tools - H/w, S/w): Java, Android Studio, XML Objectives of the project: Notifications, network calls Major Learning Outcomes: User Interface, Notifications in Android applications Details of Papers/patents: None Brief Description of working environment, expectations from the company: Flexible environment where you can work in any role of your wish Academic courses relevant to the project: OOPS	2019 20- sem1

Company	Experience	Year
Kruzr Mobility Technology Solutions Pvt. Ltd. , Bangalore	I started my work in the field of Marketing and Sales. For the first 2 weeks they taught me the workings and the procedure for the work. My first few set of works was to do market research relevant to the company, like the competitors, product differentiation, relevant companies, influencers, organizations that would be interested in our company. After the research the second set of work was of sales, for which I had to find the People in the Organizations that I found earlier who would help our company grow. I found their Email IDs and then began the work of cold Mailing. After this my work was of Digital marketing. Tool used (Development tools - H/w, S/w): Reply.io, Hootsuite, Lusha, Clearbit, Hunter.io Objectives of the project: Growth of the company Major Learning Outcomes: Marketing and Sales Details of Papers/patents: - Brief Description of working environment, expectations from the company: The working environment of the company is really good with the company being a startup you have to be ready to work at any time. With Foosball tables, PS4 and such entertainment sources in office you wouldn't want to miss the office. The team is really great who would help you out all the time. Academic courses relevant to the project: - Student	2019- 20- sem1
L&T Defence	Visualisation, simulation and control of robots Tool used (Development tools - H/w, S/w): ROS, OpenCV, OpenGL, Python, C++ Objectives of the project: Create visualisation and simulation for robot and control it using a graphical interface Major Learning Outcomes: ROS, OpenCV, OpenGL, Image Processing Brief Description of working environment, expectations from the company: Working environment is very good. Engineers are very friendly and helpful. Most of the time, we were left to ourselves to figure it out on our own, but could ask if we needed help. Company gave us a problem and let us figure out how we wanted to solve it. They expect diligent work and regular progress, but give us autonomy to find our own way and set our own targets. Very involved and hands on work, learn a lot from it. Academic courses relevant to the project: Image Processing, Data Structures and Algorithms	2018- 19- sem1
Leap Consulting, Trivandrum	The work done at the PS station included assisting with the ERP implementation process which was going on since July, other than that I did some research works based on the market conditions like finishing school, travel & tours industry& the latest on the GST bill. Making a plan for a school of which the financials were provided and each and every other detail regarding the teacher allotment & fee structure were given. The main aim for the plan was the tuition fees should be able to cover the expenses of the school. Training was given to the employees about the ERP, learning the software from the team(software) then explaining it to the employees was the major work which I did at the PS station. Tools used (Development tools - H/w, S/w): ERP Software Objectives of the project: Implementation of ERP at the Client location, giving training to the employees for the ERP software. Outcomes of the project: Once the ERP gets implemented, the place will be free from the bunch of files and documents which make the work place a complicated space, since ERP requires logins & different accounts based on the job of employees, it will ensure to maintain the workflow at the place, previously there was no hierarchical work order at the office. The new ERP system will ensure each and employee doing his/her own work without interfering in others work Major Learning Outcomes: The working of a ERP software, advance excel use while making plans of school & preparing other product related templates, Most of the other work included market research so a brief exposure to that too while doing research on various industries. Brief Description of working environment, expectations from the company: Company's working environment was very friendly, not that much strictness, timings were flexible too. The carefree nature of employees and leniency towards the ERP implementation resulted in delay of the implementation process(almost by 3 months). The company expects us to be well introduced to the market research topic & Microsoft excel relat	2016- 17- sem1

Company Experience Year

Research and analysis of market trends to estimate the feasibility of business in the domestic market and at a global level.  $\square$  Finding out opportunities the current market scenario presents for the business.  $\square$ Identifying the risks and threats and mitigation strategies. 

Study into relevant policies, schemes and legislation that will potentially have an impact on the business. 🛘 Evaluation of the internal control procedures in a company and finding and amending the risk areas. Tools used (Development tools - H/w, S/w): Excel Objectives of the project: The first part of the project involves market research on the behalf of a client of the firm - a manufacturing firm in its initial set-up phase with operations expected to begin in January 2017. The data collected is to be a part of a business proposal and financial projections report to be submitted to investors and banks. The business has two main services - manufacturing of patient support equipment and a facility for outsourced job work contracts. Data was collected from secondary sources including annual reports of companies, financial journals, industry analysis reports of trade associations and finally Govt. websites and notifications regarding policy related matters. Outcomes of the project: Project was part of the work done for clients. It helped client gain insight into the prevalent and expected trends in the market and prepare accordingly. The data was added to business report which would help raise funding. In other case, the audit benefited the higher management of the company to take decisions to enforce stricter control measures to check losses and negligence. Major Learning Outcomes: MS Excel, Tally.ERP.9, Basics of finance and accounting, financial management, management consulting Brief Description of working environment, expectations from the company: Free working environment with lot of flexibility in terms of how to approach the work. Mentors were always present to help overcome any hurdles that came inthe way. Mentor Students are exposed to extensive web development using latest technologies including Angular JS, Node JS, NoSQL databases, Wordpress, PHP etc. Interns have worked on both backend and front end technologies. Interns have significant improvements in our application and supported us as full time employees. We look forward to have interns who are sharp learners having good programming skills. Faculty Comments: Expectations from industry: Lex-Innova, is a legal solution provider that caters to litigation related needs of clients across the globe. Project assignment for interns include patent invalidation, infringement, landscape reports and Web

Development. Presently, Organization is more focused towards IT division. They look forward to have interns who have good programming skills. Technologies include WordPress, PHP, SQL, Angular JS, Node JS etc. In order to have better internship experience, students must learn one of the Version Control System(Preferably GIT), revise course on design patterns and data structures. Students should go through standard coding guidelines and follow the same during project assignments. Although most of students have good communication skills, it's better to have soft skill training which also includes email writing

Leap Consulting, Trivandrum

2016-17sem1

Lenskart POS platform. The project included designing the UI for the webpage using Angular6, HTML, CSS and Java Script. We used MySQL to write queries to easily manipulate, retrieve and manage data. SOAP APIs were written to extract data based on multiple filters. The inventory was divided into many subgroups and we were expected to apply filters on all these items in order to display daily inventory counts for all stores based on date, brand, category etc. Amazon S3 storage was used to check for anomalies in real time data collected from all stores and to store daily inventory counts. Crons were scheduled to solve the problem of time difference between India and Singapore stores when handling real time inventory counts. I also worked on developing a retry mechanism to solve errors due to network issues. Tool used (Development tools - H/w, S/w): Angular 6, MySQL, SpringSTS, Core Java, J2EE, HTML, CSS, GitLab Objectives of the project: Full Stack Web Development - The objective of the project was to add the functionality of an Inventory Management Register on the Lenskart POS platform. Major Learning Outcomes: Got an opportunity to learn and apply concepts like cron scheduling, data caching, retry mechanism, SQL queries, cloud storage etc. Learnt Frontend development using Angular 6. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Working

environment at Lenskart is very employee friendly. All team members are easily approachable. Senior management provides help, guidance and mentorship whenever required. Timings are flexible and work from home/holidays are given whenever required. Academic courses relevant to the project: OOP, DSA,

The project undertaken by me was to add the functionality of an Inventory Management Register on the

Lenskart, Bangalore

etiquette's, Student

DBMS, Student

2019-20sem1

Company Experience Year

My PS-II internship at LexInnova, Gurgaon was a very enlightening and unique experience, as I was introduced to intellectual property and patent litigation that we, as undergraduate engineers, are not too well versed with. It is an extremely specific domain that combines technical knowledge of engineering concepts, patent law and consulting. One understands the importance of patents in the constantly evolving technological landscape. The 5 and a half-month experience acts as a bridge between our academic learning in the past 6 years and meeting the expectations and deadlines of clients in the industry, including top Fortune 500 firms. My knowledge of electronics courses, along with my basic computer programming knowledge and analytical skills was put to the test, and I was often revisiting concepts taught in courses such as Analog & Digital VLSI Design and Transducers & Measurement Systems from my third year, along with electives such as Satellite Communication. However, it was even more important to have an idea of existing and upcoming technologies in different fields of technology, which was something I constantly read up online on blogs and in magazines. The company did not strictly enforce long working hours on the interns; rather, it left it to us to get involved in the projects we felt passionate about. Time management and the search and analysis methodologies were vital for submitting the deliverables on time. Once must also pay attention-todetail and be thorough. Presentation of the reports and the marketing material also play a key role – data must be categorized neatly, and laid out in a manner that is lucid. The work involves query-based searching in databases, similar to SQL, along with a iciency in Excel formulae and other Microsoft Office tools. The patent portfolio analysis allotted to me was primarily related to memory, chip architecture, networking, cloud storage and radio frequency integrated circuits, and my research on their applicability to the latest technologies enhanced my knowledge of the modern electronics and telecommunication industry. Our landscape reports and schematics, which highlight the strength and relevancy of patent portfolios of companies for divestment and review, not only drive mergers and acquisitions, but are also utilized by famous publications such as the Wall Street Journal and Forbes. Invalidity and validity analysis assignments prove to be vital for companies launching products in a country for the first time to avoid future litigation pertaining to infringement. All these analyses are therefore crucial in important business decisions. The analyses also involved consulting fellow Intellectual Property team members from BITS Pilani and IIT campuses, and experienced, well-qualified experts from universities such as Cornell and Stanford. Knowledge-sharing sessions and Six Sigma workshops are held

regularly, and the company requires you to gain iciency in soft skills as well. The internship gave me a solid foundation in litigation consulting, and helped further my career in the world of business consulting and analytics. Good feedback from the reporting managers at my PS-II station also ensures future employers that I am a sincere, well-skilled employee who puts dedication and commitment in his project. My superiors recognized my contribution to the projects and gave me an award for the same, and I was also listed as a co-contributor in some of the reports made by Lexinnova. I also obtained Six Sigma certification from the

Lexinnova, Gurgaon

firm.

2015-16sem1

Experience

Company

I worked on a varied projects ranging from Patentability, invalidity and portfolio analysis. I have worked on a good number of patents for patent Invalidation project. Patents in domains like semiconductors, multimedia, networking and medical scanning equipment were analyzed which helped me gain insight into the details and components necessary for their manufacture. The majority of the patents that I worked on involved inventions in electronics domain including semiconductors. This helped me in deep understanding of applications of the concepts that I have learned in electronics. I have worked on two patentability projects. We perform high-quality prior art searches, including an analysis of references and an in-depth discussion with counsel, where appropriate. We also extracted information of cases that were at a certain stage of prosecution and the attorneys involved with it, to help the patent litigation related cases with our expertise in patent infringement. Objectives of the project: The main objective of the project is to help clients(attorneys) working in realtime litigation cases with consulting services that involves providing prelitigation analysis, intellectual property discovery assistance, prior art analysis, litigation consulting, expert witness reports. We engineers find and review patent, non-patent and product references to support IP invalidity analysis. Outcomes of the project: I have successfully helped in finding prior-art (a patented document) for a patentability project. I have also found some sound prior-arts for two of patent invalidation projects. One related to semiconductor wafer manufacturing method to reduce the consumption of power. Major Learning Outcomes: I have had a great learning experience working on 2016-LEXINNOVA, Gurgaon patents. This expanded my knowledge base in new research areas, technology and has involved me in 17working on real-time client projects that demanded some sound work attached along with deadlines, sem1 hence learned to work well on time-constrained environments. Brief Description of working environment, expectations from the company: The working environment was perfect for learning new things every day with great technical experts and curious interns working together. We had discussion on every patent that we were working on. Although there were many such unknown terms and terminology, it wasn't hard enough to understand them because of the help we had from our mentors. Before start of any new stream of project, we were given a crisp and clear description of what to do, how to carry with it and our primary purpose of the work. I have discovered my interest in learning more about electronic related products and processes. Specially while working on apple patents, and simultaneous release of apple IPhones and events made me very curious of their technology. I followed every newly released feature in their products. And in this process, I have also come across many patent litigation cases that apple was involved in. The biggest suit in recent times was "Apple vs Samsung" on the design of the hand-set infringement. Apart from the working culture, everyone was very cordial and helpful during emergency needs. I discovered that I am more comfortable in working on new projects, changing periodically and quite frequent rather than working on same kind of project that doesn't demand new skills time-to-time. And patent analytics best suited my interest, as I could learn more about the emerging technologies and was challenging as I wished Work was on one project, a website (lexinsight.com), for which a demo website was created by the team using the LEMP stack with wordpress. The main application was developed on NodeJS, ReactJS with noSQL DBenvironment. Tools used (Development tools - H/w, S/w): linux, nginx, mysql, php, wordpress, javascript,

LEXINNOVA, Gurgaon

using the LEMP stack with wordpress. The main application was developed on NodeJS, ReactJS with noSQl DBenvironment. Tools used (Development tools - H/w, S/w): linux, nginx, mysql, php, wordpress, javascript, jquery, reactJS, nodeJS, noSQL Objectives of the project: To create a freelance marketplace for lawyers (web development) Outcomes of the project: The website, lexinsight.com is up and available on the internet. Major Learning Outcomes: We learnt how to develop websites on two major web development platforms(LEMP and the NodeJS) and optimization of workflow so as to reuse same function in multiple ways without compromising the final objective while saving time. Brief Description of working environment, expectations from the company: Lexinnova has recently shifted to the technology domain, due to which there were some minor hurdles to cross. However, our project manager was really experienced and helped us all along the project. The working environment was also rather unstable since they were shifting offices during the time. Other than that the people are very helpful and will help you with whatever issues you may face.

2016-

17-

sem1

Year

Company	Experience	Year
LEXINNOVA, Gurgaon	I have been involved with the Products team at Lexinnova who have been working towards creating a marketplace in US. They have been creating a product and a website for the same. Our work as interns was on the project of developing the minimum viable website, its testing and fixing the bugs after beta testing. The work was rewarding on grounds that it involved complete product life cycle, introduced us to the idea of how web applications work and are developed, APIs and their integration, open source technologies, version control, etc. Tools used (Development tools - H/w, S/w): Node JS, React JS, Javascript, PHP, Wordpress, LEMP Stack, Git, MySQL, Linux, Nginx Webserver Objectives of the project:To create a website which would serve as an online marketplace Outcomes of the project:We created a standalone website which assisted in freelancers to create profiles, bid for projects, collaborate and work on projects, generate invoices, and receive payments. Major Learning Outcomes:Web application flow, product life cycle, version control Brief Description of working environment, expectations from the company: Ever since Lexinnova has transformed themselves into a products company, the environment has become like a typical startup with small team, hectic work, more ownership and responsibility if work, high expectations, selfmotivation and close knit team work.	2016- 17- sem1
LEXINNOVA, Gurgaon	I have been involved with the Products team at Lexinnova who have been working towards creating a marketplace in US. They have been creating a product and a website for the same. Our work as interns was on the project of developing the minimum viable website, it's testing and fix the bugs after beta testing. The work was rewarding on grounds that it involved complete product life cycle, introduced us to the idea of how web applications work and are developed, APIs and their integration, open source technologies, version control, etc. Tools used (Development tools - H/w, S/w): Node JS, React JS, Javascript, PHP, Wordpress, LEMP Stack, Git, MySQL, Linux, Nginx Webserver Objectives of the project: To create a website which would serve as an online marketplace Outcomes of the project: We created a standalone website which assisted in freelancers to create profiles, bid for projects, collaborate and work on projects, generate invoices, and receive payments. Major Learning Outcomes: Web application flow, product life cycle, version control Brief Description of working environment, expectations from the company: Ever since Lexinnova has transformed themselves into a products company, the environment has become like a typical startup with small team, hectic work, more ownership and responsibility if work, high expectations, self motivation and close knit team work. Mentor Designation: Team Lead Contribution by the student appreciated for effective and timely completion. Motivation, self-reliance and team work are basic qualities expected apart for technical skills Designation: Team Lead Contribution by the student appreciated Designation: Product Manager Appreciated students involvement and contributions Designation: Principal Software Engineer Students contribution appreciated on live assignments Faculty Comments: Expectations from industry: Recommended Tools/Skills are the subset from R, map-reduce Hadoop, SQL, Java, JS and C depending on the activities allocated General requirement suggested by the organization are	2016- 17- sem1
LHD INDIA, Bhopal	I was involved in writing a variety of tasks ranging from writing backend APIs for their mobile and web apps, payment gateway integration for Pay Later segment (Lazypay and ePayLater), developing LHD's upcoming iOS app's authentication segment. It was a very good experience working with a small team of like minded tech enthusiasts who were excellent in their respective fields. Being inclined towards startup culture, I took NVC (New Venture Creation) course in my 2-1. I could actually see NVC discussions and presentations being implemented by people out here. When it came to web development, I was given responsibility of a complete module, be it frontend or back-end. This sense of freedom in the work allotment helped me in honing my skills from an allround perspective. Furthermore, I was allowed to collaborate with ePayLater team not only for the technical integration but also for all the formalities needed to set it up. This gave me an opportunity of understanding how things worked beyond the technology associated with it, and also a chance to interact with ePayLater's CTO! Tools used (Development tools - H/w, S/w): Python 3.6, Django-1.11, HTML, CSS, JavaScript, JQuery, Swift4 etc Objectives of the project: Developing LHD Services module (Website and app APIs) Outcomes of the project: Not only completed the main objective of the project, also got a chance to take care of multiple other IT-related segments. Major Learning Outcomes: Better understanding of web development, payment gateway integrations and basics of iOS app development. Brief Description of working environment, expectations from the company: I'll keep this short and crisp, just like the team size at LHD; Free Food (100% discount food coupons), sufficiently spaced office at a very accessible and posh location of Bhopal, accommodation + unlimited internet at accommodation provided by the company and a part of travel expenses incurred in commuting to and from the office are reimbursed at the end of every month. I had a better PS experience as compar	2017- 18- sem1

Company Experience Year

Developed a MULTI RESTAURANT FOOD ORDERING SYSTEM which is a web-based portal designed primarily to use for the food delivery in Bhopal with an online payment facilities. The portal allows to quickly and easily managing an online menu which customers can browse and use to place orders from more than one restaurant with just few clicks. Restaurant employees then use this portal to get real time order on the dashboard. Apart from this the project also involve developing a middleware to stop abusive request to LHD sever, and a real time chat feature using Slack api to increase collaboration by real time communication over chat. Tools used (Development tools - H/w, S/w): Python, Django, Angular4, Slack API, Django Channels, Websocket, Objectives of the project: The main objective of the project is to provide a new kind of food ordering website which give flexibility to the customers of ordering items from more that one restaurants Outcomes of the project: A fully functional website for online food ordering. Major Learning Outcomes: Full stack Web Development, Python Programming, Real Time Application Brief Description of working environment, expectations from the company: nice and peaceful environment, organisation has provided me iMac for work. Academic courses relevant to the project: Python Programming Mentor Designation: Senior Analyst The students are very confident and do not hesitate to ask questions at all. This makes them a great addition in team meetings where asking questions which might on the surface seem simple - but have a lot of subtleties attached to it. The communication and interpersonal skills are very commendable. Other aspects are critical thinking and reasoning - which makes them a perfect fit for bespoke analyses. Attention to detail, quick turn around times to pick up skills, being individual/team player are some other factors considered while looking at an intern. Designation: Senior Analyst The mentor has given feedback based on the following values Innovation Number savvy and inquisitive. Has been able to develop insight stories helpful for the business Passion. Hardworking and driven. Has been there for the team at times to help manage workflow and is always accountable for his/her work Community. Friendly, Helpful and Interacts with multiple stakeholdersDetermination. Wants to always push himself/herself and has taken up new projects to do the same Adaptability. Easy personality to work with and had fit into the team and MIQ environment perfectly. Faculty Comments: Expectations from industry: The PS-II station Media iQ Digital is in the domain of analytics for Digital Advertising. The 16 PS-2 students were assigned to two domains Tech (3) and Analyst (13). The analyst interns were assigned to different country specific teams. The major work involved was in campaign analysis for clients - which includes collecting data from various sources, analysing them by applying their indigenous strategies and presenting insights to clients - which can be used for betterment of the ad campaigns, brand awareness, brand upliftment etc. The approaches used are a mix of various statistical, data mining, machine learning techniques at varying complexity levels. The major tools/skills put in to use are SQL, Microsoft Excel, R, Tableau and other proprietary products of Media iQ Digital. One important outcome of the tasks done was that the students were able to visualize and tune the impact of lot of factors which affected the success/failure of digital ad campaigns. The tech interns were focused on tasks like - automating user/roles creation, automating the data ingestion from multiple sources to usable format (tables etc.) for the analyst teams to use. The work was done using LDAP, web services, Apache Camel, Jenkins, Maven, Vert.x etc. The

LHD INDIA, Bhopal

2017-18sem1

Lowe Services India Pvt.Ltd , Bangalore Worked as an intern in supply chain analytics team. Reporting and dash boarding are the 2 major fields of my work. Tool used (Development tools - H/w, S/w): MS-excel, Microstratergy, Teradata, SQL, Python Objectives of the project: The main objective of the reporting project was to track the promotion readiness of items. Dashboard was made to understand the errors in the forecasting model. Major Learning Outcomes: Learnt about use of analytics in decision making for the retail sector. Understood the business strategies of Lowe's for the home improvement. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Fantastic place to work, great work culture. Academic courses relevant to the project: Econometrics to some extent

expectations of the company in terms of technical skills is familiarity with basic programming. Most of the tools are covered as part of the intensive training provided on joining. As far as soft skills are concerned, the company looks at aspects like analytical ability, communication skills, time management and qualities

like being selfmotivated, eager learner and team player. Student

2019-20sem1

Company	Experience	Year
Lowe Services India Pvt.Ltd , Bangalore	As a part of the Customer Insights and the Macroeconomics segment of the DACI (Data Analytics segment at Lowe's), I got to work on various dashboards they maintain for important economic parameters. My work was to automate and refine those dashboards. Secondly, I also got to work on an ARIMA forecasting model which is used by Lowe's Strategy team. Apart from major projects, I also got to work and learn about web scraping and text analytics stuff. Tool used (Development tools - H/w, S/w): Databases - Teradata, Hadoop; Languages Python, SQL; Dashboarding tool - MicroStrategy Objectives of the project: Create more accurate python based forecasting model and to automate their dashboard data refresh process Major Learning Outcomes: In the past 6 months, I got to learn a lot of things: 1. Technical - Time series forecasting, Web scraping, Python (Pandas, NLTK and Selenium) and SQL 2. Non Technical - While working in the team, got to see how an analytics team works to create a story Details of Papers/patents: Brief Description of working environment, expectations from the company: DACI is the Analytics segment of Lowe's and it provides support to the US business. You'll get to learn about how the US home improvement retail industry works. All the teams here are good and have some very interesting projects. You'll get to meet amazing seniors who are always ready to help you. The work timings are convenient and the main focus is on the work you do. Academic courses relevant to the project: None	2019- 20- sem1
Lowe Services India Pvt.Ltd , Bangalore	I worked on multiple projects during the course of 5 Months which included doing Web Scraping to collect data "Using SQL to extract data from databases and using text analytics to draw reasonable inference of the raw data. Tool used (Development tools - H/w, S/w): Python Packages (Selenium, Beautiful Soup), SQL, Tableau, MS Excel, Hadoop, Teradata. Objectives of the project: To collect relevant inferences from raw data and thus help the company increase its sales and profit share in the US market. Major Learning Outcomes: The learning outcomes can be split into three parts: From Technical perspective I learnt python, Tableau, SQL etc. From a Business point of view how a fortune 50 company like Lowe's operates. I learned how Retail Analytics works, and various metrics etc., Details of Papers/patents: Brief Description of working environment, expectations from the company: The Environment is very friendly with everyone from the director to analyst is very approachable. All the people are very helpful and they help you unconditionally. The projects allocated are interesting and the office timings are flexible too. You also get to interact with the US counterparts during team meetings. The company only expects you to have a good attitude towards problem solving. Technical Proficiency in SQL, Excel, Python and other dashboarding tools are an added advantage. Academic courses relevant to the project: Nothing. Brief write-up on PS-II station: The working environment was good, with all the employees very helpful. The mentoring is good. The company expects everyone to give their maximum effort. Tools used: Python and OpenCV Academic courses relevant to the project: Machine Learning, Image Processing, Neural Networks Objectives: train a convolutional network to detect and segment road objects, road obstacle detection, lane segmentation, trajectory prediction. Soft skills - presentation and writing skills. Student	2019- 20- sem1
Lowe's India	Done Python automation as the company is moving towards using only open source tools in order to cut cost. Used Hadoop and Teradata for various data pulling activities and analyses. Tool used (Development tools - H/w, S/w): Python, SQL, Teradata, Hadoop, Excel Objectives of the project: Python Automation of Customer Health Scorecard Major Learning Outcomes: Python, Big data platforms-Teradata and Hadoop, SQL, Regression Brief Description of working environment, expectations from the company: Very supportive working environment, flexible working hours. Experts to help me out whenever stuck. Extensive training programs held periodically. Amazing food. Fun activities held from time to time. Football sessions on Friday. Academic courses relevant to the project: Its specific to the company and wont fit into any of the courses in college. Name: Mayank G Jain (2015A8PS0449G)	2018- 19- sem1
Lowe's India	My work at Lowe's India was in the domain of retail data analytics. I was in the merchandising team that dealt with ad hoc and long term requests regarding a wide range of key performance indicators like sales, cost, margin, inventory etc: The analyses that we performed were fact based insights drawn from vast amounts of data, that helped business take key decisions. The projects I worked on were a part of the daily business issues and offered me great insights into the working of the company. I learned a lot of technical and business aspects, but most importantly I experienced firsthand the rigours of the corporate world and that was a great experience. Tool used (Development tools - H/w, S/w): Teradata/SQL, Python, M.S. Office, Hadoop, DARt Objectives of the project: Providing viable business insights Major Learning Outcomes: Technical skills, Retail knowledge, Corporate etiquette Brief Description of working environment, expectations from the company: The work environment is great and there is a constant influx of interesting work. You have to be a little forthcoming in order to get work assigned. The teams are extremely helpful and there is a lot of inter and intra team interaction. The facilities are world class, and the office is a very nurturing environment. Academic courses relevant to the project: Data Analytics, Machine Learning, RDBMS Name: Krushal Patel (2015A3PS0085P)	2018- 19- sem1

Company	Experience	Year
Lowe's India	My work mainly dealt with analyzing data to find problems in website performance from a marketing perspective. Do the customers find it easy to navigate through the website? What are the main webpages leaking the most traffic? Which social media brings in the most revenue through Ads & Affiliates? The work is very exciting and you're never doing the same type of work. Tool used (Development tools - H/w, S/w): Teradata, SQL, Adobe Analytics, Advanced Excel Objectives of the project: Website & Channel Optimization Major Learning Outcomes: Aside from the technical skills mentioned above, what you learn the most is Character development. When you get responsibilities with real consequences, you learn how to tackle problems that arise how to approach those tasks, how to handle failure & how to treat success. These things, I feel are the most important learning from this internship. Brief Description of working environment, expectations from the company: The work culture is really great. You are treated just like any other employee. You get the same kind of responsibilities & work. Your fellow colleagues are always there to help you whenever you're stuck. The managers & Mentors are always there to support you. Name: Jay Baldev (2015A4PS0408H)	2018- 19- sem1
Lowe's India	I worked in Operations Analytics team at Lowe's. Most of my work was related to Store Operations and Supply Chain Analytics. My work included using Python, SQL and Hadoop. All of my projects were descriptive in nature and ranged from exploratory data analysis to making interactive dashboards. Tool used (Development tools - H/w, S/w): Python, Teradata SQL, Hadoop, Microstrategy VI, Excel etc. are some of the software that I used. Objectives of the project: Objectives of my project was to help in improving store operations and supply chain by providing better planning and reporting tools. Major Learning Outcomes: Technical Learning Outcomes - Python, SQL, Analytics, Dashboarding, Data Story Telling. Non Technical Outcomes - Understanding Retail industry, Supply Chain, Logistics and Inbound, Corporate Etiquette, Team Work and Planning. Academic courses relevant to the project: Supply Chain Management, Database Management Systems, Data Mining. Name: Adya Arora (2015A3PS0233G)	2018- 19- sem1
Lowe's India	My learnings can be categorized into two parts: 1. Technical Aspect: I have learnt how to handle data and the use of platforms like Teradata and Hadoop. I have also learnt how to use Python to alter and manipulate the data and give meaningful insights. 2. Business Aspect: I have learnt a great deal about Lowe's, its business models and strategies and the basics of retail in general. As a member of the pricing team, and with the tariff wars between the US and china, I have seen firsthand the importance and the large impact that pricing has on the business. Tool used (Development tools - H/w, S/w): Excel, Tearadata, Hadoop, Python, MicroStrategy Objectives of the project: Tariff Mitigation Major Learning Outcomes: Retail, Pricing decisions and their impact, handling data and deriving meaningful insights Brief Description of working environment, expectations from the company: DACI is great! The work is very interesting and the people here are great, and with analytics being a relatively new field with a lot of buzz around it, and I couldn't have asked for a better place to start my journey! Academic courses relevant to the project: Principles of Economics	2018- 19- sem1
Maybank Labs Pvt. Ltd. , Bangalore	Working on backend development for mobile application and web. Created Rest web services for the system using JAVA with Spring boot and hibernate/JPA, designed the database, wrote queries and PL/SQL procedures in Oracle SQL developer. Tool used (Development tools - H/w, S/w): JAVA,Oracle SQL Developer, Spring boot,JPA Objectives of the project: Backend Development of Mobile and Web Application Major Learning Outcomes: JAVA,SQL,Spring,Hibernate,JPA,DSA Details of Papers/patents: Brief Description of working environment, expectations from the company: Agile work environment. Proper projects were assigned and monitored. Good learning experience. Academic courses relevant to the project: OOP, DSA Student	2019- 20- sem1
MBRDI	My work was to develop a simulation model on STARCCM+ to simulate the cooling from seat-integrated ventilation system. There is some test data available using which the simulation model needs to be validated. My entire work was focused on modifying the numerical parameters and studying how the cooling varies. I had suggested the necessary changes for the test setup based on this and tried improving the prediction of temperatures. Tool used (Development tools - H/w, S/w): STARCCM+, ANSA, Python, MATLAB Objectives of the project: Simulating forced convection cooling in ventilated seats Major Learning Outcomes: Tool knowledge, Working with huge simulation files (in my case), Formal presentations and documentation Brief Description of working environment, expectations from the company: Work hours are flexible, mostly depending on your team. You'd be expected to work 9 hrs on an average everyday. There is food (free) and transport (minimal cost) available. There's plenty of resources (access to journal papers, etc) to learn whatever is necessary for your project. The work is only system-based and, there are no recreational activities at the office. Academic courses relevant to the project: Heat Transfer, Fluid Mechanics, Computational Fluid Dynamics	2018- 19- sem1

Company	Experience	Year
Mech Mocha Internet Pvt. Ltd. , Bangalore	The work ranged from developing individual features to developing a game. Most of the games were outsourced from other companies, hence integration was the main task. Android Studio was used along with the game development softwares like Cocos Creator, Construct 2 and Construct 3. Tool used (Development tools - H/w, S/w): Android Studio, Cocos Creator, Construct 2, Construct 3, Jenkins, Amplitude, GoLand. Objectives of the project: Game Development Major Learning Outcomes: Got to learn about Game Development. Working in a professional environment is an experience, try to cherish it. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment was professional with proper roadmaps present for future products. The company provided proper hardware and software to carry out the work smoothly. Academic courses relevant to the project: Brief write-up on PS-II station: Mentor Graphics Tool used - OpenCV - C++ Course - Digital Image Processing Changes - DIP is taught on MATLAB. Instead of using Matlab, OpenCV with Python/C++ can be used. Student	2019- 20- sem1
Media Iq Digital, Bangalore	Campaign analyst Tools used (Development tools - H/w, S/w): SQL Objectives of the project: To optimize the campaign and improve market visibility Outcomes of the project: Improved market visibility Major Learning Outcomes: Soft skills and hard skills Brief Description of working environment, expectations from the company: Work culture is really cool.	2016- 17- sem1
Media Iq Digital, Bangalore	Worked as campaign analyst. Managed and optimize campaigns. Worked on MS Excel and MySQl. Also worked on various company tools to download the reports. Worked with traders and help them to optimize the campaigns in digital advertising industry. Created Insights using MS PowerPoint for the clients. Tools used (Development tools - H/w, S/w): SRS,DPI, AppNexus, CMS, CLS, MS Excel, MS PowerPoint, Slack,MySQl Objectives of the project: Targeting the audience at niche level using KWs, Site Domains etc. Strategies for ads. Optimize the ad campaigns. Working with trader for further optimization. Creation of insights to present to the clients. Outcomes of the project: Successfully optimizing the campaign thereby fulfilling the needs of the clients and making profit for the company. Showing ads to the target audience. Major Learning Outcomes: Various tools such as Excel, SQL, SRS etc. Work life balance. Professionalism. How ad industry works. Opportunities outside. Brief Description of working environment, expectations from the company: Working environment is very cool. Young batch of employees. Nice place to work. Everything easily accessible. Nice cool people. And helpful too. Very less vacancies. Tough to get a PPO.	2016- 17- sem1
Media Iq Digital, Bangalore	Analytics Tools used (Development tools - H/w, S/w): Sql Objectives of the project: Media analysis Outcomes of the project: Insights for clients Major Learning Outcomes: Digital advertising and its regulations Brief Description of working environment, expectations from the company: Cool work environment	2016- 17- sem1
Media Iq Digital, Bangalore	Worked on different advertising campaigns to obtain better performance. Also worked on sales pitching(CMP) and verticals. Insight reports were prepared to be sent to the client to give insights on how the campaign performed. Tools used (Development tools - H/w, S/w): sql, Excel, Power point Objectives of the project: Objective was to work on different advertising campaigns and to optimize these campaign to get better performance in terms of delivery, ROI etc. Outcomes of the project: Most of the Campaigns were optimized to get desired delivery. Major Learning Outcomes: Major learnings were SQL to pull data from database for different campaigns and using Excel to do the analysis to optimize the campaign. Real time bidding (RTB) process, Market Research. Brief Description of working environment, expectations from the company: Working environment is very friendly and employees are really helpful.	2016- 17- sem1
Media Iq Digital, Bangalore	Campaign optimization and Analysis Objectives of the project: Campaign optimization and analysis Outcomes of the project: CPM increased and fetched more campaigns in the following months Major Learning Outcomes: Corporate level communication, Advanced Excel, SQL, DBMS, Business Intelligence Brief Description of working environment, expectations from the company: All colleagues are very friendly and cooperating by nature, most important of all is the professional conduct maintained in the company they will be unbiased while giving you the feedback which enhances your learning.	2016- 17- sem1
Media Iq Digital, Bangalore	Ad Campaing Optimisation Tools used (Development tools - H/w, S/w): SQL,Excel,Powerpoint,and Hive Objectives of the project: Campaign Analysis Outcomes of the project: Optmization Of Various Ad Campaigns Major Learning Outcomes: SQL,Excel,Powerpoint Brief Description of working environment, expectations from the company: Good working Culture with emphasis on Creativity and learning	2016- 17- sem1
Media Iq Digital, Bangalore	Worked on Data analysis using SQL and Hive Tools used (Development tools - H/w, S/w): SQL,MS Excel,and Hive Objectives of the project: To analyze data to prepare insights useful for company. Outcomes of the project: Insight report directly used by clients. Major Learning Outcomes: Introduced to Data Science Brief Description of working environment, expectations from the company: Good, helpful people with a great work life balance. Company works on latest technology so it is a great place to learn and grow.	2016- 17- sem1

Company	Experience	Year
Media Iq Digital, Bangalore	Analytics Tools used (Development tools - H/w, S/w): Excel, R, Java, Python, sql Objectives of the project: To analyze data Outcomes of the project: Analyzed data Major Learning Outcomes: how to analyze data Brief Description of working environment, expectations from the company: Very good PS	2016- 17- sem1
Media Iq Digital, Bangalore	Worked for a complete project for web data aggregator for recording user's activity for analyzing user's behavior. Apart from this I worked on a website both frontend and backend, using ReactJs. This firm gives a lot of independence to work on anything of our choice. I got to work completely on both backend as well as frontend, for different websites. The technical team here is well advance, and works and adapts to new technology available. Tools used (Development tools - H/w, S/w): ReactJs, Spring Framework, SQL, Apache Maven, Nginx, Apache Kafka, Druid, Jenkins. Objectives of the project: To collect the activity of user and analyze it to find his probability to click on our advertisement and even to find computerized bots based on anomaly. Outcomes of the project: This project has helped in finding the bots working on our advertisements. Even the probability based on the average time spent by the user on the page was found. This helped in optimizing the users we target and hence reducing the cost of advertising. The UI build by me helped the analyst to keep a record of running queries for extracting the social media(Tweeter) Data. This UI helped in validating the queries and checking the approx. load the query would give on server based on past one month's data. Major Learning Outcomes: I learned everything regarding building a project from scratch. Testing servers, building UI, running JavaScript code on website to extract user details, working on websockets, making GET and POST calls, setting webapps for receiving the calls and logging data and analyzing the data are the fields I have worked on. Working in our own way without any restrictions and seeing the changes immediately on the production helped me to learn a lot. Brief Description of working environment, expectations from the company: The environment of the company is very friendly. You can even reach to the CTO in case of any urgency, without any sort of prior appointment. Most of the employees working here are young which helps in knowing different	2016- 17- sem1
Media Iq Digital, Bangalore	I worked on making dashboards to monitor and manage the various the advertisement campaigns that Media IQ is running. Tools used (Development tools - H/w, S/w): SQL, in built company Business intelligence tool Objectives of the project: To make dashboards Outcomes of the project: Easy data visualization and hence make strong insights. Major Learning Outcomes: Learnt SQL and excel Brief Description of working environment, expectations from the company: Very nice work culture. No pressure on the interns. Company just expected us to do the work that was assigned to us.	2016- 17- sem1
Media Iq Digital, Bangalore	Data analytics and pulling data from amazon redshifts and analyzing it to predict our audience etc. Tools used (Development tools - H/w, S/w): SQL,excel,PowerPoint Objectives of the project: To optimize a running campaign Outcomes of the project: Increase in budget to the allotted campaign Major Learning Outcomes: SQL,excel Brief Description of working environment, expectations from the company: Good working environment	2016- 17- sem1
Media Iq Digital, Bangalore	Worked on building an optimization dashboard using ShinyApp and R Tools used (Development tools - H/w, S/w): R, ShinyApp Objectives of the project: Building an optimization dashboard using ShinyApp and R to better visualize data Outcomes of the project: Improving accuracy and interpretation of data Major Learning Outcomes: Learnt how to work with different tools used in predictive modeling Brief Description of working environment, expectations from the company: Good work given. Relaxed work atmosphere.	2016- 17- sem1
Media Iq Digital, Bangalore	UI Development Tools used (Development tools - H/w, S/w):REACTJS, GIT, JIRA, JAVASCRIPT Objectives of the project: UI Development Outcomes of the project: UI Development Major Learning Outcomes: UI Developer Brief Description of working environment, expectations from the company: One can become full stack developer and have a great learning experience.	2016- 17- sem1
Media Iq Digital, Bangalore	Web development Tools used (Development tools - H/w, S/w): Javascript, angularjs, elastic search Objectives of the project: UI redesigning & implementing elastic search Outcomes of the project: Modified UI Major Learning Outcomes: Development and integration of front end and back end Brief Description of working environment, expectations from the company: Chill out working environment	2016- 17- sem1

Experience Year Company I have worked extensively with Microsoft Office for reporting. I have also helped run campaigns and got acquainted with AppNexus and related proprietary platforms for Digital Display Trading. I have learnt SQL along with various campaign strategies and tools used to execute the same. Tools used (Development tools - H/w, S/w): SQL, Excel, R Objectives of the project: To describe the Research and Analysis strategies deployed in Digital Display Advertising and the various tools I have used to execute the same during my time at Media IQ Digital. Outcomes of the project: My work at Media IQ Digital has revolved around Reporting and Campaign Analysis, contributing to the productivity and efficiency of the campaigns, while 2016-Media Iq Digital, Bangalore at the same time also helping in the development of proprietary products at Media IQ Digital through 17constant scrutiny and feedback. Major Learning Outcomes: My work at Media IQ Digital has revolved sem1 around Reporting and Campaign Analysis, contributing to the productivity and efficiency of the campaigns, while at the same time also helping in the development of proprietary products at Media IQ Digital through constant scrutiny and feedback. Brief Description of working environment, expectations from the company: This project provides documentation of various methods of Data Visualization, while at the same time describing the numerous online tools that help execute these strategies and their uses for a particular campaign. I worked here as a campaign analyst. My work here majorly focused on campaign optimizations, analyzing data and deriving insights out of it. Worked on Demand Side Platforms like Appnexus and DBM and used My Sql as one of the language. Tools used (Development tools - H/w, S/w): My Sql Objectives of the project: To optimize campaigns based on given Key Performance Indexes Outcomes of the project: Improved 2016performance of the campaign and helped company increase margin on few campaigns. Major Learning 17-Media Iq Digital, Bangalore Outcomes: Different KPI's terms in digital advertising, My Sql, Appnexus, DBM, company based few sem1 products used for developing insights and improving campaign performance. Brief Description of working environment, expectations from the company: Work culture is good; seniors are very helpful and cooperative. Learning process is easy. Training is not so good but once allotted respective teams, learning improves. Good place to get experience but not the right one to expect a PPO. My work at Media IQ Digital has revolved around Reporting and Campaign Analysis, contributing to the productivity and efficiency of the campaigns. I have worked extensively with Microsoft Office for reporting. I have helped in running campaigns and got acquainted with AppNexus and related proprietary platforms for Digital Display Trading. I have learnt SQL along with various campaign strategies and tools used to execute the same. The work can be summarized as unlocking insights in order to help drive business growth based on the data acquired from running the campaigns. Objectives of the project: To describe the Analysis strategies deployed in Digital Display Advertising and the various tools I have used to execute the same during my time at Media IQ Digital. Outcomes of the project: Documentation of various methods of Data visualization like Insight reports, Dashboards, etc. Major Learning Outcomes: Insight into the world of online advertising and learnt a lot about how it works. Apart from the technical aspects, this experience has helped me in becoming more disciplined by adhering to deadlines and also helped me in enhancing my soft-skills. Brief Description of working environment, expectations from the company: The work environment at Media IQ is great. The transition from being a student in college to an intern in corporate sector, working alongside the employees was very smooth, thanks to fantastic work environment, and the friendly and helpful nature of the people working here. The people working here are so knowledgeable and they expect us to be pro-active and are always there to help us. They value our opinions and 2016-Media Iq Digital, Bangalore suggestions related to the work assigned and are patient in helping us if things don't go well sometimes. I 17am very grateful to have worked with a wonderful team, who made it very easy for me to adjust to the sem1 corporate lifestyle. In a nutshell, it was a great experience filled with lots of learning. Mentor Designation: Principal Engineer and Technology Architect Students have worked on READWHERE Website and Android App using PHP, Android development studio, React native and Java. Interns have made significant improvements in Android module. We look forward to have interns from core computer science background who are proactive, creative, can contribute to new ideas, eager to learn new stuff and have excellent communication skills. Faculty Comments: Expectations from industry: Mediology is a software Solutions Company focused on providing end to end technology solutions for the media and publishing industry. Project assignments includes developing and improving READWHERE website and Android App. Organization look forward to have interns who have done core computer science courses, should be proactive, creative and contribute to new ideas. Organization technology stacks includes PHP, Android, Angular JS, Node JS, React Native etc. In order to have better internship experience, students must learn one of the Version Control System(Preferably GIT), revise course on design patterns and data structures. Students should go through standard coding guidelines and follow the same during project assignments. Although most of students have good communication skills, it's better to have soft skill training which also includes email writing etiquette's. Student

Company	Experience	Year
Media Iq Digital, Bangalore	Data Analysis - Media Campaign Management and optimization. Also involved delivering insights. Tools used (Development tools - H/w, S/w): SQL, Excel, PPT, R Objectives of the project: Delivering Insights and upping revenue nos by optimization Outcomes of the project: Inspire through Insights Major Learning Outcomes: Data Extraction tools (mentioned above), Digital Marketing, and automation procedures. Brief Description of working environment, expectations from the company: Super friendly. Ownership culture. Jump into the deep end as soon as possible. Poor transparency.	2017- 18- sem1
Media Iq Digital, Bangalore	Collection data and representation. Objectives of the project: To learn how to analyze things Major Learning Outcomes: SQL Brief Description of working environment, expectations from the company: employee friendly.	2017- 18- sem1
Media Iq Digital, Bangalore	Basically you will be working on many ad campaigns. This includes understanding and managing ad campaigns using media iq tools and secondary research. Tools used (Development tools - H/w, S/w): SQL, MS excel and power point, Hive, Tableau, internal company tools. Objectives of the project: Understanding and managing an ad campaign Outcomes of the project: good understanding of the display advertising world. Major Learning Outcomes: well versed with the usage of SQL,MS Excel and power point and good experience in the usage of Tableau and Hive. Brief Description of working environment, expectations from the company: Working environment is extremely good. The employees and team members are really helpful in nature. One can learn a lot while in Media IQ, not only related to the company.	2017- 18- sem1
Media Iq Digital, Bangalore	Digital advertising analytics Tools used (Development tools - H/w, S/w): SQL, EXCEL Objectives of the project: To learn about digital advertising analytics Outcomes of the project: Learned about digital advertising Major Learning Outcomes: Basic data analytics using Excel, knowing how digital advertising works Brief Description of working environment, expectations from the company: No clear distinction in technical and analytics while filling PS 2 and was allotted on basis of profile. For non tech it's good. But for technical, it is risky as it depends on your profile if you will get it	2017- 18- sem1
Media Iq Digital, Bangalore	Interning as Analyst Intern, work did during the P was to analyse the data that was pulled from data tables using SQL/Hive queries and sometimes the reporting service of the company itself, depending on the type of data that was required for analysis. The analyzed data was shown in the form of charts and diagrams on PowerPoint. More recently, Tableau was used also used to create custom dedicated dashboards. My work was mostly around creating those dashboards. Tools used (Development tools - H/w, S/w): SQL, PowerPoint, Excel, Tableau, Hive, R Objectives of the project: To create standard but dynamic dashboards using tableau thereby automating the work Outcomes of the project: The delivery turnaround time reduced significantly because of the dashboards Major Learning Outcomes: Leaned SQL and Tableau. Brief Description of working environment, expectations from the company: At Media IQ, the employees are really helpful and friendly, the working hours are flexible. In the semi-formal environment, you can expect occasional festive celebrations too. Talking about the expectations, it was expected of the company to provide quality tools, facilities, opportunities and good environment, which the company successfully provided.	2017- 18- sem1
Media Iq Digital, Bangalore	The work involved handling of digital media campaigns for various clients. It included setting up a campaign, optimizing the campaign towards campaign goals and reporting the performance back to the clients. Tools used (Development tools - H/w, S/w): SQL, R Studio, Microsoft Excel, Microsoft Powerpoint Objectives of the project: Handling digital media campaigns Outcomes of the project: Good performing campaign generated higher revenues through margins Major Learning Outcomes: Able to analyse huge amount of data by joining different data sources and better understanding of the digital media market Brief Description of working environment, expectations from the company: Each member of the team was very enthusiastic about their work and was ready to help with any problem, be it work related or otherwise.	2017- 18- sem1
Media Iq Digital, Bangalore	Full Stack Web Development . Mostly the work was related to debugging-issues of the product of team I was working in . Also I made a dashboard for user onboarding (clients). Tools used (Development tools - H/w, S/w): Javascript , java Mysql Objectives of the project: Make a dashboard for user onboarding , and also bug-fixes Outcomes of the project: Skill improvement as a full stack web developer Major Learning Outcomes: React , Redux , Agile working of teams , Java EE , Mysql Brief Description of working environment, expectations from the company: The work environment is chilled and very open to ideas and innovations . Very friendly colleagues and mentors. Academic courses relevant to the project: OOP , DSA	2017- 18- sem1

Company	Experience	Year
Media Iq Digital, Bangalore	Campaign Analysis for digital advertisement: correlations with weather, stock market, etc. Using R, Excel, SQL, Tableau to generate insights. Tools used (Development tools - H/w, S/w): R, Excel, SQL, Tableau Objectives of the project: Generate Insights for Ad Campaigns Outcomes of the project: How the campaign ran overall? Major Learning Outcomes: Tableau Brief Description of working environment, expectations from the company: Good working environment. No office timings. Most of the guys here are BITSians. Academic courses relevant to the project: None as such, some knowledge of Machine Learning is okay. Student	2017 18- sem1
Media iQ Digital, Bangalore	I worked as a campaign analyst. Most of the work is pretty basic and is done via SQl and Excel. Tool used (Development tools - H/w, S/w): SQL,Excel, Amazon Web Services. Objectives of the project: Insight Requests Major Learning Outcomes: Learned how to make good PPT's, using Excel and SQL. You also get all the knowledge of digital advertising. Brief Description of working environment, expectations from the company: Work environment is pretty chill, you can expect a lot of outings. Work hours are flexible. Take this station if you want to get in Analytics. Name: Saransh Mohanty (2015A1PS0687P)	2018 19- sem1
Media iQ Digital, Bangalore	The work revolved around the analysis field. Routine work included running SQL queries and extracting data, analysing it to gather insights and preparing a deck for the client. Project work included scoping into the field of automation and NLP Tool used (Development tools - H/w, S/w): Python,R,Tableau,SQL,Hadoop Objectives of the project: Handle the Insights request and n gram analysis Major Learning Outcomes: Major Insights to the Analytics sector and the field of Digital Marketing. Brief Description of working environment, expectations from the company: Really good working environment. Most of the staff is from BITS and therefore it is easy to gel in. Work culture is positive and team encourages to take up new projects that align with the company objectives.	2018 19- sem1
Mediology Software Pvt. Ltd., Gurgaon	My project was to make a completely new website from the ground up, using the Yii framework v2.0, leveraging the enhanced capabilities it offers to optimize the code. A primary requirement of the project is to incorporate all the features and functionality offered by the old website into the new one. The present Readwhere store website is based on the older Yii version 1.1, which is compatible only with an older PHP version 5, and has stopped receiving any updates or bug fixes from its developer team, which is now focusing on its new product, Yii 2.0, which promises better performance, support and security features, and is also compatible with the latest versions of PHP, making it indispensable for any future development. Tools used (Development tools - H/w, S/w): Yii framework, PHP, jQuery, Elasticsearch Objectives of the project: New and better main website for the company store Outcomes of the project: Website created and successfully tested for production deployment Major Learning Outcomes: Experience working as a team player, following rigorous and well tested coding practices, Web development using Yii framework and PHP Brief Description of working environment, expectations from the company: An informal work environment, with high emphasis on results with an outcome-oriented approach. It's good to have a work from home option as long as you can meet the deadlines and have no backlogs. A work hard and party harder culture as the median age of employees is about 25-26 years.	2016 17- sem1
Mediology Software Pvt. Ltd., Gurgaon	1. Worked on ElasticSearch queries to manipulate database apis. 2. Built an app in React Native, multi and cross platform environment developed by Facebook which is based on JavaScript. 3. Built an app in the native building environment, i.e. Android Studio. 4. Worked on Shell Scripting to automate the overall gradle build process of an android app. Tools used (Development tools - H/w, S/w): JavaScript, ElasticSearch Port, Imagick, PHP, Android Studio Objectives of the project: 1. Helped in familiarizing with Elasticsearch 2. Helped in familiarizing with React native 3. Helped in familiarizing with languages like JavaScript, PHP, ShellScript, Java Outcomes of the project: 1. HTML form to perform various kinds of information extraction from an Api using elasticsearch. 2. HTML form to perform conversion and resizing of an image in various other formats. 3. A NewsHunt like app with React Native. 4. A NewsHunt like app with Android Studio. 5. A Shell Script for app gradle build. Major Learning Outcomes: Major knowledge booster in terms of different languages that are being used in web and app development. Got an insight to how a IT organization functions and its course of action. Brief Description of working environment, expectations from the company: Working environment was great. It was something that I never heard of before as most of the companies today are very peculiar about their work. But, it is not the case in Mediology, as I got to experiment with my procedures to get something done. The other major thing was everyone was very supportive especially my mentor, Mr. Piyush Pathak. They often made me feel as if they were my family members. My expectations from this organization are quite optimistic, as the personals working here have immense talent and the company is also coming up with some great value products. Student	2016 17- sem1

Company	Experience	Year
Mentor Graphics , Bangalore	Design to Image contour conversion. Fancy name for drawing lines using OpenCV Tool used (Development tools - H/w, S/w): OpenCV - C++ Objectives of the project: The project was aimed at retrieving Manhattan layouts from SEM images of fabricated chips using image processing techniques. Major Learning Outcomes: If STL counts as learning. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The people here are very nice, you get free food and all. However, they'll mostly give you IT related work and not core. Academic courses relevant to the project: DIP Student	2019- 20- sem1
Mercedes Benz , Bangalore	Method Development, Durability Analysis, Simulations and Finding better alternates to existing designs. Design of Experiments Tool used (Development tools - H/w, S/w): NASTRAN, ABAQUS, HYPERMESH, ANSA, HYPERVIEW Objectives of the project: Finding viable and feasible design for Running Board Major Learning Outcomes: Creative Thinking, Problem Solving and various softwares used in core fields Details of Papers/patents: Brief Description of working environment, expectations from the company: Good working environment. Work focused. Good amount of work is given. 9+ official working hours. PPO scenes very tough though. Academic courses relevant to the project: CAD/CAE	2019- 20- sem1
Mercedes Benz , Bangalore	Topic: Random Vibration Fatigue Analysis on Motor Casing. The electric motor is used in E-Drive applications. Fatigue is an import factor based on which warranty and time to service cars are decided. Random vibrations is a load that usually designers don't pay enough attention to, and the source of such vibration is due to the road profile and other external factors. In this study, we aim to perform a frequency analysis to identify the problematic eigenvalues and also perform a fatigue analysis to calculate damage and life cycle of the motor casing. Tool used (Development tools - H/w, S/w): HyperMesh, OptiStruct Objectives of the project: Identify the stress concentration areas and observe the effect of random vibration fatigue on the component as a whole Major Learning Outcomes: Learnt about fatigue loading and mathematics used in FEA tools for solving such problems. Also gained insight on current E-Drive research being performed in MBRDI. Details of Papers/patents: None Brief Description of working environment, expectations from the company: My department (RD I/CCD, Powertrain Division) had several teams under the umbrella. Although I didn't have the opportunity to interact with all, my colleagues were welcoming and ready to help me in any situation. My mentor was available in all times of crisis and directed me toward the solution at the end of the day. Although 9+ hours of timing was officially mentioned, my manager was not specific about it, so I really had to stay only until I had work. Timings are flexible too, although I came early and left early. Outside work, I had several trips with my colleagues, to nearby tourist attraction. We also played football every week, and I also participated in an inter-department tournament in the time I spent here. Academic courses relevant to the project: Automotive Technology, Electromagnetic Theory, Finite Element Analysis (FEM), Mechanical Vibrations, Mechanics of Solids Student	2019- 20- sem1
Mercedes Benz R&D India	Computer Aided Engineering, Finite Element Analysis, Finite Element Simulations Tool used (Development tools - H/w, S/w): LS-Dyna, LS-PrePost Objectives of the project: Development of Advanced Simulation Tools Major Learning Outcomes: Finite Element Method Brief Description of working environment, expectations from the company: Work culture is very encouraging and motivating. It enables a person to obtain a new perspective on learning. It helps a person to develop an interest towards research. Academic courses relevant to the project: Finite Element Method, Mechanics of Solid Name: J.Praveen (2015A4PS0333P)	2018- 19- sem1
Mercedes Benz R&D India	The project allotted to me was 'Numerical simulation of external surface convective heat losses from the engine'. The engine I worked upon was already tested in a test bed facility, and I was provided with the test bed data. In my project, I did 3-D CFD simulations for the convective heat losses from the engine for different engine load points and validated the same with the test bed data. Also the dependency of engine surface heat transfer coefficients on different parameters was studied. Tool used (Development tools - H/w, S/w): STAR CCM+ Objectives of the project: To determine the convective heat losses from an IC engine via CFD simulations. Major Learning Outcomes: CFD Principles, CFD tool, Dependency of heat transfer coefficients on different parameters. Brief Description of working environment, expectations from the company: MBRDI provides a positive and constructive working environment. A task plan is provided to the student in the first week itself, hence the student is aware of the deadlines. Manager and mentors were very supportive and were open for suggestions. The team expects a strong knowledge in the area of project allotted from the student. I also enjoyed participating in different extra-curricular events like sports meets, cultural fests and awareness programs. Academic courses relevant to the project: Heat Transfer, CFD, Fluid Mechanics Name: Uday Gurupada Adiga (2014B1A40703G)	2018- 19- sem1

Company	Experience	Year
Mercedes Benz R&D India	Created a python based machine learning tool that can be used by most people. Using algorithms present in python modules, a metamodel can be created that is accurate enough to replace CAE simulation Tool used (Development tools - H/w, S/w): Python (scikit-learn, tkinter) Objectives of the project: To create a GUI that can assist to create machine learning models for any dataset Major Learning Outcomes: Python based GUI, Machine Learning algorithms Academic courses relevant to the project: Computer Programming Name: Dinesh Guntur (2015A4PS0225H) Tool used (Development tools - H/w, S/w): LS-Dyna, MS Excel Objectives of the project: parametric analysis of femur bone in a 3-point bending test using fe simulations Major Learning Outcomes: Meshing, LS-Dyna Name: SHREYAS ANIL BARAPATRE (2015A4PS0315G)	2018- 19- sem1
Mercedes Benz R&D India	I had to evaluate the performance of battery cooling plates using Nanofluids as a coolant via CFD simulations. Initially, I did literature survey and summarized property correlations for Nanofluids. Also, I had 1 week training for Star-CCM, which is the software for CFD simulations. I explored different multiphase models for Nanofluids and used them to evaluate thermal performance of battery cooling plates in Electric Vehicles. Tool used (Development tools - H/w, S/w): Star-CCM, MS Excel Objectives of the project: Performance evaluation of Battery Cooling Plates using Nanofluids as a coolant Major Learning Outcomes: Star-CCM, Multiphase and Turbulence modelling, Presentation skills Brief Description of working environment, expectations from the company: Very friendly and helpful environment to work.	2018- 19- sem1
Mindfire Solutions, Bhubaneshwar	Our work revolved around Android Application Development. The basic concept used in the development of the application was Augmented Reality. We studied the topic for the first 2-3 weeks and then developed a proof of concept for the application. After that, we started our work on developing the full-fledged application, and were successfully able to complete the development by the end of our Practice School. Tools used (Development tools - H/w, S/w):A laptop with Android Studio installed. Objectives of the project: Developing an Android Application enabling people to virtually try-on costumes. Outcomes of the project: A full-fledged Android Application has been developed. Major Learning Outcomes: Good mentoring and project opportunities have made me quite confident in the field of Android Development. Brief Description of working environment, expectations from the company: The working environment in the company is great. In spite of being a 16 year old company, the work environment is quite similar to those of start-ups. The mentors are always ready to help and clear the doubts. The chances of a PPO are not that good, as of now. Apart from that, this can be counted as an IT station, where there is an opportunity to develop something, rather than just doing the routine testing or debugging work.	2016- 17- sem1
Mindfire Solutions, Bhubaneshwar	My project was creating an Android App with NFC(Near Field Communication) features. The company asked me to create an NFC app for their new startup DateTheRamp. DateTheRamp is an ethnic dress renting service portal, to every dress is an NFC chip is attached in order to track them. What our app does is that it reads the chip and get the details of the dress, write some necessary details to the NFC chip, send server requests to do tracking operations. Tools used (Development tools - H/w, S/w): Android Studio, Swagger, Post Man, An NFC enabled Android Device (Samsung Galaxy J3). Objectives of the project: 1. Read/Write operations on NFC 2. Sending server requests for a. registering the NFC chip, b. sending read/write operations output to server, c. sending tracking related data Outcomes of the project: A complete Android App with NFC features and usable for tracking dresses for DateTheRamp startup. Major Learning Outcomes: Java coding, Android App Development, a part of Web Development (server side). Brief Description of working environment, expectations from the company: The environment is friendly, cooperative and provides a good learning experience for a trainee. The company expected me to complete the Android App which I completed, so the company is happy.	2016- 17- sem1
Mindfire Solutions, Bhubaneshwar	Assisted Form Filling Using Speech Recognition and Natiral Language Processing. Tools used (Development tools - H/w, S/w): Python, HTML, CSS, JS, Selenium Objectives of the project: To fill online form by taking input in normal conversational English from the user Outcomes of the project: Successfully filled a demo site. Major Learning Outcomes: Learned in detail about various libraries and modules of python such as BS, CGI, SELENIUM etc. Brief Description of working environment, expectations from the company: Working Environment is exceptional. People are very friendly and helpful. The projects allotted are interesting.	2016- 17- sem1

Company Experience Year

The project title is DEVELOPING A WEB APPLICATION FOR VOICE ENABLED ONLINE FORM FILL UP. Different stage of completing the project and the Time plan are listed below: 1) Studying Python and other web-designing techniques: - From 4th July, 2016 onwards till the end of month. 2) Learning and incorporating NLTK and RegEx to extract relevant data from user input: -August. 3) Using Beautiful-Soup to parse and extract web-attributes from Online-Form: - September & October. 4) Matching the data with the respective web-attributes, Filling them back to the Online-Form and shaping the overall project in the form of an Application using Python Tkinter GUI (incorporating Google Voice-to-Text API perfectly), Looking for possible optimizations and accuracy improvement:- November to 14th December, 2016. Tools used (Development tools - H/w, S/w):A UNIX platform, Python 2.7 Interpreter, Selenium Web driver, Chrome Browser, NLTK, Python Tkinter GUI module, Google Voice-to-Text API etc. Objectives of the project: To combine NLP and Voice-to-Text Conversion and other relevant modules of Python to come up with an application that can help users to fill online forms using voice input. Outcomes of the project: A working application to fill a given Online - Form using voice input. Major Learning Outcomes: Python, NLP, Selenium, Various Modules of Python such as CGI, NLTK, TextRazor, RegEx, advanced knowledge of Web Designing in AJAX and JS. Brief Description of working environment, expectations from the company: My experiences: 1) The workplace is really very interactive and friendly to wholeheartedly take part in our assigned project work. 2) Flexibility of choosing project work as well as expressing our own thoughts for the betterment of the project we are going to dive into. 3) Reasonably good stipend as well as food facilities and also a lot of other facilities as well. 4) Our CEO (Mr. Chinmoy Panda Sir, BITS Alumni) is an extremely helpful personality and the employees over here are even very frank and friendly too. 5) The place Bhubaneswar itself is even quite decent to stay and there are reasonably good facilities available for our official work too. 6) Having been a new PS2 station (in fact for the first time) this company greeted us so warmly and made such a remarkably good work-environment for us, which is inexplicable. 7) The most important point to be stated is that our projects are quite worthwhile and related to reallife Computer Science domains and we are really satisfied with our incrementally sound learning experiences which I think will definitely help us later on to continue our professional career . I personally thank PSD(Practice School Division), BITS Pilani again for giving me such a nice opportunity to work in a wonderful company called Mindfire Solutions, Bhubaneswar which even having been in a relatively smaller scale (as compared to companies like Amazon, Adobe etc.) manages to cater to all the attributes that a typical renowned Software company does impart !!! Indeed Agile Software Development is the aspect which this company has set the goal for captivated me a lot. Finally, I would highly recommend my juniors of the upcoming batches to opt for this PS2 (Practice School - II) station which, I think, would definitely help them inculcate

their Software Development skills as well as skills related to real-life Computer Science domains for their professional and technical upliftment required later on. Mentor Designation: Head of the Automotive, Aerospace and Defense Department PS students who worked in automotive area, worked on search engine optimization, social bookmarking, title generation, preparing samples and preparing full length report. All the students were able to complete a full report in 24 hours. Two of the students were able to make a sale and the remaining were able to generate 300 leads a month. Outstanding student's

characteristics are: Most hard working, Innovative and Smart work, Ability to hold the team together, Very responsible and reliable. The characteristics the company looks for in interns is: Interest to learn, Punctuality and Smart work. Faculty Comments: Expectations from industry: Mordor intelligence is a market research company. The students conduct extensive primary and secondary research. From the data collected, they generate insights on the market, identify niche areas and produce reports. There is no specific skill required to do this job. It will be helpful to have working knowledge of MS Office. Some students may be involved in lead generation and interacting with clients. Training in soft skills may be handy but there is no mandatory requirement for the same. Students are well trained by the organization

to develop the skills required to perform the role of a market research associate. Student

Mindfire Solutions, Bhubaneshwar 2016-17sem1

Company	Experience	Year
MiQ Digital India Pvt. Ltd. , Bangalore	Working environment here basically deals with Improvement in the productivity and efficiency of the products and client relationship with the company. Understanding Big Data and using data analytics to provide advertising insights to the client (advertiser or agency) for business and advertising strategies. Improving or developing new tools to ease data management and enhance automation for easier insights generation for MiQ as well as its clients. Tool used (Development tools - H/w, S/w): Qubole, Amazon Redshift, Tableau, Jarvis, Hive, Spark, SQL, R Studios, Objectives of the project: The objective of my project was to use tools like Hive, R, Tableau and Jenkins and fulfil clients requests on a daily basis as well as built automated tools for business ease Major Learning Outcomes: 1) Gaining knowledge of Ad Campaigns 2) Learning Big Data Processing tools like Hive, Sql and Apache Pyspark, R and Python 3) Visualization tools Tableau 4) Machine Learning and Statistics concepts like Text analysis in deep learning and K means in Unsup Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment in MiQ is very comfortable and employee friendly. People are always motivated to complete their work before the deadlines. Work load on a daily level depends on the team/pod you're working in. Everyone is always ready to help in whichever way possible. Also many people are usually working on different projects, so if at all anyone gets a chance to work on them, they can learn a lot from it. Academic courses relevant to the project: Basics of SQL, R, Python is a plus	2019- 20- sem1
MiQ Digital India Pvt. Ltd. , Bangalore	Took up various analytics projects for major clients and made a custom reporting solution for video ad campaigns using R programming. Tool used (Development tools - H/w, S/w): Redshift, SQL, Tableau, R, Python, Qubole (Hive), Excel Objectives of the project: To automate frequently requested reports. Major Learning Outcomes: Learnt basics of analytics and programming and Tableau. Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: Excellent working and learning environment. Company expectations are fine and manageable. Good work life balance. Academic courses relevant to the project: Machine Learning, Data Mining, DBMS, DSA Student	2019- 20- sem1
MiQ Digital Pvt. Lt, Bangalore	Works on analysis and insight generation from the data and worked on creating automations to drive the redundant, worked on novel frameworks and in-house technology products and services for running digital advertisement campaigns. Tool used (Development tools - H/w, S/w): R, SQL Workbench, Hive, NLP Libraries in Python and R, Objectives of the project: Optimization of the advertisment campaigns. Major Learning Outcomes: Learnt about building machine learning models, Processing large datasets and different tools. Brief Description of working environment, expectations from the company: Environment is very friendly for learning and testing out new ideas and proposals. Academic courses relevant to the project: Machine Learning	2018- 19- sem1
Mordor Intelligence, Hyderabad	Mordor Intelligence is a market research and consulting firm. The Company comprises of mainly two teams-Sales and Research . I got to work initially for two months in Sales and later moved on to healthcare research team. The work is selling market reports which give the brief idea to client about the market. Its restraints, drivers, challenges, opportunities, market segmentation on basis of type and applications. It also provides geographical segmentation of that market. The sales department helps selling the report and the research department makes the report. Our company has 14 domains and some of them are chemicals, healthcare, agriculture, Animal Feed, Automotives etc. Tools used (Development tools - H/w, S/w): Microsoft Excel, MS Word, and Notepad Objectives of the project: Market Consulting and Analytics Outcomes of the project: Data Analytics, Market Prediction Major Learning Outcomes: Data Analytics, Market Prediction Brief Description of working environment, expectations from the company: Learning environment, opportunity to work with young growing minds	2016- 17- sem1

Experience Year Company In Mordor Intelligence, I worked on Report Description, Table of Contents, Sample and different parts of a report such as Drivers, Opportunities, Restraints, Market Segmentation, Regional Analysis and Company profiles of particular market. In report description we write summary of the particular market, in sample we elaborate one part of each segment of the report and in company profiles we write about company's history, its products/services related to that particular market, financials, SWOT analysis, recent developments and analyst view. Objectives of the project: Using secondary research make a report on specific chemical material Outcomes of the project: I learnt about all the skills that an analyst would require, to succeed in his career. I learnt what market research analysis is and techniques utilized in analyzing a market.PS has taught me how to work in a team. I learnt about market strategies adapted by global leaders, interpreting the data available to forecast the market, understanding the market conditions 2016-Mordor Intelligence, and its driving factors. I also learnt a lot through interacting with my senior members of the team and 17-Hyderabad discussing things with my peers. Major Learning Outcomes: Communication and Analytical Skills, sem1 Teamwork, Typing speed Brief Description of working environment, expectations from the company: Mordor Intelligence is a very good place to work and learn new things in the field of market research. For a beginner like me, it was a great experience to work with market research firm like Mordor Intelligence. I feel the very purpose of PS2 is fulfilled as I got to work as a part of a team where synergies make a big thing come true. I learnt to perform in pressure conditions with accuracy. I got clear about my future prospects and learned the fact that this is where a person starts and eventually grow. When you work as a part of a big firm and you share responsibilities, you need to be confident for every step you take as at the end you are answerable for any outcomes. So it was a good experience here in Mordor Intelligence, lots of things learnt, a sudden change of mindset and I am sure eventually these things will be reflected in my daily actions too. I learnt about understanding various market conditions, impact of the major decisions in industrial growth interpreting the data available to forecast the future growth of an industry or market and about the strategies adopted by leading players in the market to overcome fluctuations and environmental regulations. I also learnt the technical skills regarding the tools that are used by the analysts in market research. Working with the team is all alone different experience when compared with all of the above mentioned advantages because it helped me to overcome some of the preconceived ideas and weaknesses and gave me an ability understand the strengths of different individuals to face challengers while learning new techniques and pressure to meet the deadlines of the reports that have to be submitted where I learnt time management and distribution of work within the team. This helped to gain confidence to work 2016-Mordor Intelligence, 17not only with the familiarities in the market research analytics field but also in any other industry and for Hyderabad my professional career that I am supposed to face in future and confidence to start anything on my own by sem1 cumulating the efforts of different individuals to a directed target. Tools used (Development tools - H/w, S/w): MS Excel, MS word Objectives of the project: Making samples of the market, RD's and TOC's, Company profiles of the industry players. Outcomes of the project: Analytical skills to use tools and estimate the market prospects of different industries in various regions Major Learning Outcomes: skills to forecast market with data available from various sources and team work to produce effective results. Brief Description of working environment, expectations from the company: Work environment is friendly with little restrictions on timings and particulars and also stress free environment. Proper guidance from seniors in the team to work on the reports we have to make. I got the opportunity to get a hands-on experience on the workings of a detailed market reports, analysis the scope of growth for a particular market, its current global scenario, factors driving the market, factors that may act as the roadblocks for the growth of the market, growth opportunities in the future, information regarding the producers, vendors, suppliers, consumers of the particular product, variations in the demand of the product specific to the regions/countries as required, and every other detail regarding the product which was demanded by the client. Objectives of the project: Performing quantitative and qualitative analysis in chemicals and materials domain. Outcomes of the project: You get to work on realtime projects, the reports. Apart from that, the important outcome is the learning part- understanding of the service sector market in India (corporate exposure), understanding of the global market and the 2016-Mordor Intelligence, factors influencing it and market research. Major Learning Outcomes: My experience here has helped me 17-Hyderabad have enough knowledge in writing a report on any topic related to the chemicals and materials, which sem1 according to me, is going to serve me a great deal of advantage in the future. This has also helped in improving my MS excel and MS words skills. Brief Description of working environment, expectations from the company: Being a startup, the work culture at the firm is very comfortable in the sense that there is no compulsory dress code. In case of any problem, you can directly contact the co-founders (one of them is a BITS alumnus) and this eradicates all sorts of problems that might arise due to sticking to the hierarchical system of working. Quite a lot of persons in my team are ex Bitsians and the work culture is very friendly. Almost all of the team members were of the same age group, and this helped in developing a bond rather quickly, and in the end, made the experience enjoyable.

Experience Year Company I worked for two different segments in the company viz. Sales and Market Research. For Sales, my work was to pitch market reports to various clients from different companies around the world. The contact was searched using LinkedIn and cold calling was done. Around 100 different international clients were called and reports were pitched to them. In the domain of Market Research for healthcare, my work was to conduct Secondary Research to find relevant market data. This was done by extensive google search using correct keywords, reading annual reports of various companies and literature survey. The data and information obtained was verified by conducting Primary Research. Big officials from relevant companies were called and information was validated through a scheduled interview or conversation. An excel sheet containing all the data was made and using some excel formula, forecast was done. Tools used (Development tools - H/w, S/w): Excel Objectives of the project: To conduct secondary and primary research as parts of Market Research and prepare Market Report. To pitch various report samples to clients either on phone or via email, negotiate with the clients about the price of the report, address his 2016-Mordor Intelligence, issues and close the deal. Outcomes of the project: Work of Sales worked as a marketing strategy for the 17-Hyderabad company that is expected to reap long term benefits. The clients to whom projects were pitched might sem1 come back in the future and purchase reports that will boost company's revenue. Market Research helped in on-time delivery of the market reports to the clients. This indirectly added to the company's revenue as the efforts that were put in, ensured that the company could take more projects which in turn increased its revenue. Major Learning Outcomes: For sales, I learnt how to perform cold calling. In Market Research, I learnt how to perform secondary and primary research, some excel formula and how to analyze data and write market segmentation parts. Brief Description of working environment, expectations from the company: The work culture is chill for market research and strict for sales where there is more pressure to close the deal and sell the product. The work of sales becomes very redundant as it comes down to calling different people and pitching them reports on the phone. In market research, however, the reports are of various topics on, every other day. So, it is not redundant and there is relatively very much opportunity to know new things. Nevertheless, the learning scope is not so much as the company is still in its initial phase. I expected data analysis on excel but that was not extensive. The overall learning experience at Mordor Intelligence, Hyderabad was satisfying. I was exposed to different segments of the market report. Most of the information collected is from primary and secondary research. I learnt about various big players in the chemical and materials industry. The information we collected was mainly from the annual report of that company. Learning the process of developing a market report helped me build my analytical and communication skills. We were always working in a team, which developed my soft skills. The experience of working in this company helped not only with learning new things but also with decisiontaking abilities. The size of the company is moderate which helped me 2016-Mordor Intelligence, understand the whole structure and chain of the market research firm. Tools used (Development tools -17-Hyderabad H/w, S/w): Microsoft Execl and Word Objectives of the project: Performing quantitative and qualitative sem1 analysis in chemicals and materials domain. Outcomes of the project: Market reports were prepared using primary and secondary research. Major Learning Outcomes: Enhanced analytical skills and communication skills Brief Description of working environment, expectations from the company: Mordor Intelligence has no more than 150 employees. It is in the Gachibowli, which is corporate area of the city. Most of the employees are in their 20's. They are friendly and always helping. There are no such skills required to do the job but it will improve your knowledge of the domain you are working in.

Company	Experience	Year
Mordor Intelligence, Hyderabad	In the company, I was given a chance to work on each of the above areas, and eventually on complete segments and then actual reports requested by customers. The experience i got assisted me in many ways which include putting together relevant information on a variety of topics, providing analysis meaningfully and in a structured manner and picking up on the formatting options available in MS Excel and MS Word. I also gained deep understanding of variety of topics related to Automotive. I am also given content writing positions, which helped me develop my writing skills and the skill to analyze and write articles on diverse topics on short notice. I also learn to work under pressure, since Mordor Intelligence often has to deliver within very tightly packed deadlines. Tools used (Development tools - H/w, S/w): MS Word, MS Excel Objectives of the project: Analysis of Market and Forecasting the market. Outcomes of the project: I got to know about the Advanced Driver Assistance System Market and foretasted this market. Major Learning Outcomes: Market Estimation, Porters, Competitive Landscape, Market Segmentation and Company Profiles. Brief Description of working environment, expectations from the company: Being a very young startup, it often has to deliver a lot of information to clients in short notice. To achieve this and keep ahead of the competition in this Market, the company has highly motivated teams of analysts. Hence, I was often encouraged to come up with advanced ways to work. In MI, analysts often work on samples and send it to clients for free of cost which in return might not be profitable many times so I suggested them to maintain a large database of all the samples that they had done till date and give access to some of the potential clients for a reasonable cost. This idea of mine was appreciated and put in motion by my team FAAD. Hence, the company gives interns to work in a start-up environment, where even though the work may not be very engaging on the learning curve too steep, interns can still	2016 17- sem
Mordor Intelligence, Hyderabad	During my PS-II, I got the opportunity to work for different departments according to the requirements of the company. I started in the Sales team where we spent learning about Mordor goes about acquiring clients. I learnt about cold calling and then after few days, I was given the permission to go actually look for potential clients and the call them. I worked with the Sales team for about two months after which I had to work in the healthcare department where a new project had come up with a short deadline. I worked in the healthcare department gathering news related to the animal feed market and segregating the news events of major companies based on the requirements of the client. After this project, I was sent to the Investment Opportunities team. So, I worked in the investment opportunities department writing Report descriptions, TOC's, company profiles, samples etc.I worked on many market entry reports as well which had tight deadlines. Objectives of the project: Data analytics and Market research in the domain Investment Opportunities Outcomes of the project: Projects helped Mordor Intelligence doing more extensive and comprehensive research for their projects.Moreover we helped the organization with Ideas in new and unique markets. Major Learning Outcomes: I worked in the domain - investment opportunities and it majorly involved looking for new markets in the Middle East. So I learnt a lot about the market. Brief Description of working environment, expectations from the company: The working environment is good and the team leads are very supportive. Overall it was a good experience.	2016 17- sem
Mordor Intelligence, Hyderabad	I worked in the Sales Department as well as the Market Research Department. The work in Sales team mainly included generating leads and then cold calling potential clients. The work in the research team was to work on sample reports. It mainly included writing report samples and gathering data for market estimation Objectives of the project: To learn the work done by a market research analyst Outcomes of the project: Worked on market research reports and learned about the kind of work done in completing market research reports. Major Learning Outcomes: Learned some market size estimation techniques. Brief Description of working environment, expectations from the company: The Company expected us to work mainly when they sold their reports and we had to work to assist the employees in finishing the reports within deadlines.	2016 17- sem

Company Experience Year

At Mordor Intelligence, I got a glimpse of what it is like to work with a start-up. A client-centric Market Research and Consulting firm, the company makes research reports, which are compiled by carrying out qualitative and quantitative analysis and gathering information from primary and secondary sources. Thus its clients can make better decisions through accurate data, market forecasts and expert insights. The company provides reports in various domains are prepared depending on the client's requirements, often tailored to meet specific needs and budget constraints. The reports are exhaustive, consisting extensive descriptions of the market summary, and the drivers, constraints and opportunities of the market. This is followed by the market segmentation which is done by usually type, by application and by geography. Some reports may have others sub segmentations depending on the market. The company also provides a competitive landscape of the major players in that particular market, including the summary of the strategies adopted by the key players for their growth, as well as the most active players. The company has two main work profiles, namely Sales (Business Development) and Research. Tools used (Development tools - H/w, S/w): Excel, Word. Objectives of the project: The Company gives interns to work in a start-up environment, where even though the work may not be very engaging on the learning curve too steep, interns can still develop their skills to brainstorm, innovate, work with teams and deliver under pressure. Outcomes of the project: I started work in the sales team. My role as a business development intern gave me the opportunity to converse with executives at important position in major companies, which taught me to speak clearly and concise language with people who are hard pressed for time and patience. After the mid-sem, I was shifted to research upon request. In between, my short stint as a content writer helped me develop my writing skills and the skill to research and write articles on diverse topics on short notice. The company has 14 domains working on different market domains, and I was attached with the Automotive, Aerospace, Defense and Feed market research team. Major Learning Outcomes: I was given a chance to work on each of the above listed topics, and eventually on complete segments and actual reports requested by clients. Such hands on experience helped me in many of ways. I was able to quickly search for a put together relevant information on a variety of topics, and learnt about the intricate formatting options available in MS Word. I learnt to work under pressure, since Mordor often had to deliver within very tight deadlines. Also, working on the plethora of topics as I did, I was able to gain knowledge and an understanding of a range of things in the automotive, aerospace, defense and animals feed sectors. Brief Description of working environment, expectations from the company: The Company provides reports in various domains are prepared depending on the client's requirements, often tailored to meet specific needs and budget constraints. The reports are exhaustive, consisting extensive descriptions of the market summary, and the drivers, constraints and opportunities of the market. This is followed by the market segmentation which is done by usually type, by application and by geography. Some reports may have

Mordor Intelligence, Hyderabad

Mordor Intelligence, Hyderabad I had worked in 3 departments in the company which are SEO, Business Development and Market Research. I learnt the basic skills that are required to optimize search engine in order to get more leads. In the business development department I learnt how to deal with the clients and their requirements and come up with the strategies that are best for the company and its clients. In market research I was trained on the techniques that are required for analyzing the market. I had mastered in primary and secondary research and also learnt market mapping and market engineering. So i have assimilated all the skills that a market research analyst would require. Tools used (Development tools - H/w, S/w): MS Word, MS Excel, and MS PowerPoint. Objectives of the project: 1. To optimize the number of leads by improving the search engines and social media. 2. To find potential buyers of the products and deal with client needs. 3. To do primary and secondary research to obtain the market data and perform market analysis. 4. To compile the data into a report. Outcomes of the project: The project has helped me learn the necessary skills of a market research analyst and has provided me with a positive perspective on business development. I have gained skills on improving the site's rank by optimizing the search engines and social media results. Overall the project has provided me with good amount of motivation to pursue my career in any of these fields. Major Learning Outcomes: ☐ Market Research Insights ☐ Business leads and prospect generation ☐ MS Excel ☐ Communicational Fluency ☐ Negotiation Skills Brief Description of working environment, expectations from the company: One gets to learn a lot as it's a startup; you can work in a bunch of departments and learn about them. Work timings are quite flexible, it's just you have got to work for 8 hours. All the employees are very helpful and friendly and can provide you with a lot of guidance.

others sub segmentations depending on the market. The company also provides a competitive landscape of the major players in that particular market, including the summary of the strategies adopted by the key players for their growth, as well as the most active players. The company has two main work profiles,

namely Sales (Business Development) and Research.

2016-17sem1

2016-

17-

sem1

Year

Experience

Company

Mordor Intelligence is a market research firm and sells market reports to major stakeholders of an industry, which aids in taking key decisions for them. It is organized into 14 domains like agriculture, chemicals and materials, healthcare, automotive and defense, food and beverage etc. Market is analyzed on the basis of current trends, government policies, competitive scenario, etc. On the basis of this analysis, a forecast for the next five years (may vary, according to client's requirement) is made and a detailed analysis of it is provided in the form of a report. Important components of a typical market report written here are drivers, restraints, opportunities, market segmentation (on the basis of product type, applications, end-user industries and geography), company profiles of major players, value chain analysis, Pestle Analysis, competitive landscape, etc. There was no single project that any one of us worked on, but multiple reports and samples and some documentation work of the firm, based on sale of the reports and demand from the sales department who are in touch with potential clients for samples. As a part of the Chemicals and Materials team in this firm, I have written almost all the sections of a report, on different markets, that have been included in the reports sold during my stay here. I have also worked on a report individually, that has given me a lot of clarity on how to make a market report. I have also worked on a number of samples that are given to the client, on the basis of which the client makes a purchase decision. 2016-Mordor Intelligence, Tools used (Development tools - H/w, S/w): No tools were used in the project- just Excel and Word 17-Hyderabad Objectives of the project: Do market research and analyze the market trends to give detailed description sem1 and forecast for the next five years. Outcomes of the project: You get to work on real-time projects, the reports. Apart from that, the important outcome is the learning part- understanding of the service sector market in India (corporate exposure), understanding of the global market and the factors influencing it and market research. Major Learning Outcomes: I got to learn a lot about the market in the chemicals field, the economies of a lot of countries, how different forces affect the market scenario, how to analyze these factors and trends and how to forecast. I've also gotten exposed to measurement of the market size of different segments. Brief Description of working environment, expectations from the company: Work environment is very lenient. Work allotted extends for a maximum of two days. So the projects are very short term, making it relatively simple. Working hours are flexible, and can be managed according to the work allotted to you. The more responsible and sincere you are for the work, the more important (involving more learning opportunities and higher risk) work you get. The environment is such that you do and learn. It is good to ask questions and discuss and work for more learning and higher efficiency. It varies from team to team. The best working environment is in chemicals and materials and in automotive teams, both in a different way. But rest of the teams are not so transparent. Outbound pitching of reports to potential clients from companies across the globe. Cold calling and following to close successful deals. Working on inbound leads to generate sales revenue for the company by selling market research reports. Worked on company profiles and financials like market share, size and charts for an assignment. Sold various reports generating huge revenue for the company. Tools used (Development tools - H/w, S/w): Ring Centra, Knowlarity, Prosperworks, Excel spreadsheets, MS- Word, LinkedIn Objectives of the project: Generating revenue by selling Market research reports Outcomes of the 2016-Mordor Intelligence, project: Successfully closed deals worth \$20,000 Major Learning Outcomes: Communication skills, 17-Hyderabad Negotiation, problem solving and approach, handling a tough situation Brief Description of working sem1 environment, expectations from the company: Target oriented working environment which helps an individual get used to facing today's competitive work culture in the world. Supporting the employees by their approachability and encouragement to innovative ideas and bringing out the potential in an individual. Taught me how to maintain the balance between hard work and smart work to obtain maximum productivity. Encouraged me equally by providing incentives for all the sales that I closed. A great platform for people aiming at learning oriented work culture with a great scope and ambitious future. I worked in the AFNB market research team in Mordor. I mainly worked on domain building in the first two months. After that I made report samples which were sent to the clients. As the design of sample was changed, we included new sections like market trends to attract the clients. I also collected information for the reports by means of primary research. Finally I worked on different sections of the reports like drivers, restraints, opportunities, company profiles and market segmentation etc. Objectives of the project: To create an insight on the working of a consultancy firm and understand market research analysis. Outcomes of the project: I learnt market research analysis and understood how startups work. Major Learning 2016-Mordor Intelligence, Outcomes: I learnt market research analysis and can make my own report of any market now. Brief 17-Hyderabad Description of working environment, expectations from the company: The Company is located in the fifth sem1 floor of Brigade towers in the Gachibowli financial district. It has central AC and operates via LAN. We can either work on a laptop or a desktop. There are no specific rules regarding the clothing. Work is given on a daily basis and varies with the sales of reports. We are expected to work at least 8 hours a day. Initially, choice is given to work either in sales or in market research teams. There are several domains and each domain has their own segment in the company. As an intern, I was guided by a senior analyst in the company. The office timings vary depending upon your domain.

Company	Experience	Year
Mordor Intelligence, Hyderabad	Writing Market Research Reports, Analyzing Market trends of products or services. Tools used (Development tools - H/w, S/w): No special tools used, work is majorly done in Microsoft Word and Excel. Objectives of the project: Learn to Market Research. Study Market Trends of products and services. Outcomes of the project: Market Research Reports. Major Learning Outcomes: Learned about work done by market research industry. Brief Description of working environment, expectations from the company: Good working environment, great time flexibility. Expected a much lively market research but didn't reach my expectation.	2016 17- sem1
Mordor Intelligence, Hyderabad	During my PS-II, I got the opportunity to work for different departments according to the requirements of the company. I started in the Outbound Sales team after which I worked with the Healthcare team on a secondary research project. After this project got over, I was shifted to the Automotive and business development team where I began working on LinkedIn Ad campaign. As the LinkedIn project got over, I worked on the quarterly magazine of the automotive department where I had to find recent product launches. Eventually I ended up in the Energy and Power department, although I did work for the Investment Opportunities and the HealthCare team for brief periods in between. I worked on different report titles from diverse sectors writing company profiles and report samples according to the client's needs. Working for different departments presented different challenges and greatly enhanced my learning experiences which would not have been possible if I had only worked for a single department. Tools used (Development tools - H/w, S/w):Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Grammarly Objectives of the project: Data analytics and Market research in Energy and Power domain Outcomes of the project: Researching about a particular market and then using predicting the trends depending on certain factors Major Learning Outcomes: I worked with different departments helping teams which required additional people to meet deadlines which would not have been the case due to the small size of their teams. I worked on a number of things starting right from client acquisition through cold calls and LinkedIn ads to completing market research reports in different domains. Brief Description of working environment, expectations from the company: Mordor Intelligence provided a comfortable working environment with helpful and approachable employees. The company provided us with challenging and mentally stimulating tasks. Thus it fulfilled all the expectations and learning experiences I wanted from a PS 2 station. Mentor	2016 17- sem1
Mordor Intelligence, Hyderabad	Study the market and make reports/samples/proposals for different industries, like the automotive industry sub-segments. Tools used (Development tools - H/w, S/w): Excel, Word, PPT, Little bit of SQL usage(not used by everyone). Objectives of the project: Make Reports on Topics Outcomes of the project: Multiple Project reports/samples/proposals Major Learning Outcomes: Excel, SQL. Brief Description of working environment, expectations from the company: Working environment is dependent on the team you get within the company. There are some negative elements in different teams but overall my colleagues were good and were easy to make friends with. The company expects you to work hard and give time to complete the work. Academic courses relevant to the project: Market Research.	2017 18- sem1
Mordor Intelligence, Hyderabad	The work done here aims at studying the market and prepare a report analysing the strategies to be followed by our clients. We analyse different markets and prepare reports for them to make their strategies. Tools used (Development tools - H/w, S/w): Excel, word, ppt Objectives of the project: Analyse and study market Outcomes of the project: knowledge of the industry Major Learning Outcomes: Market Research Brief Description of working environment, expectations from the company: Good, not much of corporate atmosphere Academic courses relevant to the project: Finance courses	2017 18- sem1

Company	Experience	Year
Mordor Intelligence, Hyderabad	The work is totally related to market research, including secondary research, primary research, and data handling work on MS Excel. Work at Mordor would help an individual to improve writing and speaking skills and in knowing how to approach even the higher management people in corporate firms. Interns are trained for the work and there are no pre-requisites for the work at Mordor. Market research doesn't fall in any of the courses offered at BITS hence except for Technical Report Writing, which helps in improving formal writing; a primary requirement at this organisation. Tools used (Development tools - H/w, S/w): MS Excel, MS Word, MS PowerPoint Objectives of the project: Market Research Outcomes of the project: Knowledge on various markets and the research methodology Major Learning Outcomes: Research methodology and soft skills Brief Description of working environment, expectations from the company: The working environment is very organic. Levels of hierarchy are low and interns have direct contact with the team leads almost everyday. There is no dress code at Mordor and has a five day week. The description of work looks simple but the real challenge is in improving the quality of the research output. The company expects an employee to put 8 working hours minimum and also to work extra hours during to meet a few delivery deadlines. Hard work and commitment would lead to a PPO. Good luck. Academic courses relevant to the project: Technical Report Writing (TRW)	2017- 18- sem1
Mordor Intelligence, Hyderabad	Designed and built an intelligence center for the healthcare domain. Worked on market modelling, market estimation through primary and secondary research. Also worked on repository which includes writing syndicate market research reports Tools used (Development tools - H/w, S/w): MS-Excel, MS-Word and MS-PowerPoint Objectives of the project: To build an intelligence center particular to diabetes and to update syndicate reports for repository Outcomes of the project: A complete diabetes care IC with 21 markets covered across 15 countries for 10 years along with company shares of major players(at country level). A repository with 17 syndicate reports updated in a span of one month Major Learning Outcomes: Market research, primary and secondary research, market estimation, syndicate report writing, top down and bottom up approach for data collection and data analysis. Brief Description of working environment, expectations from the company: The company expects individuals to do end-to-end work and also gives freedom (to some extent) in doing so. Lot of scope for learning.	2017- 18- sem1
Mordor Intelligence, Hyderabad	I worked on Diabetes Intelligence Centre where I prepared modelling sheets of 15 countries of each and every global market which was included in the intelligence centre. Also I worked on Repository reports where I had to update existing reports, add recent discoveries and product launches and also included analysis in each and every segment of the report to convert it into a standard market research report Tools used (Development tools - H/w, S/w): MS - Excel, MS - Word, and MS - Powerpoint Objectives of the project: Prepared the first Healthcare Intelligence Centre and updating of Repository reports Outcomes of the project: Data extraction, data analysis, market research, data mining, market analysis Major Learning Outcomes: Data extraction, data analysis, market research, data mining, market analysis Brief Description of working environment, expectations from the company: Flexible working timings, healthy and learning environment, the employees, the team leads were helpful and kind during the whole tenure of PS2. Academic courses relevant to the project: NO Course is relevant as far as I know	2017- 18- sem1
Mordor Intelligence, Hyderabad	Modelling Sheets on Diabetes Care Intelligence Centre Tools used (Development tools - H/w, S/w): Microsoft Office Suite Objectives of the project: Healthcare Intelligence Centre to be made Outcomes of the project: Market Analysis, Market Research, Data Extraction Major Learning Outcomes: Market Analysis, Market Research, Data Extraction Brief Description of working environment, expectations from the company: Very chilled out environment with no time constraint. But have to complete 9hrs Howsoever. Not much of learning, Repetitive work. Academic courses relevant to the project: PMQC, Pharmacology	2017- 18- sem1
Mordor Intelligence, Hyderabad	I worked on Intelligence Center for first interim in which we prepare the modeling sheets for "Diabetes Care" market. As a team we worked on 21 markets. In second interim we worked on repository during which we updated all the old reports as well as we made converted them to syndicated report. Tools used (Development tools - H/w, S/w): Microsoft Excel, Microsoft Word, Google Drive and Microsoft Powerpoint Objectives of the project: To prepare a descriptive modeling sheet containing not only market values but also the details of all primary and secondary sources. Outcomes of the project: We prepared an intelligence center. Major Learning Outcomes: I learned about Excel, Powerpoint and I learned about the basic of market estimation. Brief Description of working environment, expectations from the company: It was very cooperative and understanding, but the package offered was very low according to the work. Academic courses relevant to the project: PMQC, Pharmacology	2017- 18- sem1

Company	Experience	Year
Mordor Intelligence, Hyderabad	Worked on approximately 40 reports since my joining, ranging from the pharmaceutical industry to medical devices and bio technology, catering all aspects of healthcare and gained a wholesome experience. Tools used (Development tools - H/w, S/w): EXCEL Objectives of the project: To attain a wholesome idea about healthcare analytics and market research. Outcomes of the project: Learnt the usage of different analytical tools to do industry, market and company analysis. Collected data using primary and secondary methods and worked on factors affecting market dynamics, competitive landscaping, company profiles, market segmentation and other parts of the report. As a part of a 10 member team, generated revenue worth USD 77,000 in the third quarter of fiscal year 2017. Major Learning Outcomes: Worked on Market Estimation of certain markets which tested my tenacity, reasoning and analytical skills to the fullest, endowing me with a comprehensive experience of market sizing. Brief Description of working environment, expectations from the company: A healthy working and learning environment. Given the company is in its nascent stage, employees and interns are closely knit and share equal burden of work. Although very limited prospect of thriving and personal development.	2017- 18- sem1
Mordor Intelligence, Hyderabad	The work includes writing the following in report, Report description, Research methodology, Market dynamics which includesthe drivers, restraints, and opportunities, Market segmentation which is based on the Purpose and geography, the company profiles of the major industry players, and the competitive landscape. Tools used (Development tools - H/w, S/w): work is done mostly on excel,pptand word. Objectives of the project: writing reports on markets according to the clients request Outcomes of the project: learning about the companies in C4ISR market Major Learning Outcomes: u learn a little about the market in the department you are working in but it wont be usefull to u in future Brief Description of working environment, expectations from the company: working environment is good and people are free to come at their own timings. Academic courses relevant to the project: no courses required	2017- 18- sem1
Mordor Intelligence, Hyderabad	worked on various market reports, and size estimations along with consult projects Tools used (Development tools - H/w, S/w): MS EXCEL, MS WORD, MS POWERPOINT Objectives of the project: MARKET RESEARCH ANALYSIS Outcomes of the project: discussed various segments of a market research report and market modelling and size estimation Major Learning Outcomes: Learned about various ongoing and historical trends in Healthcare industry, various cause-effect relationships in the working of healthcare market, market modelling and dynamics Brief Description of working environment, expectations from the company: the company offers a chilled out place to learn new things, people are friendly and we are given responsibility for our work.	2017- 18- sem1
Mordor Intelligence, Hyderabad	Creating a statistical database with forecasting some market elements. Making reports based on market research Tools used (Development tools - H/w, S/w): MS Word, Powerpoint, Excel, made my own Objectives of the project: To make a statistical database with forecasting of all the data points a client may need and to make a market research report as per the client's requirement. Outcomes of the project: A statistical ready-to-sale database was created and some market research reports were made. Major Learning Outcomes: Better understanding of Market analysis, drivers restraints, SWOT analysis etc. Brief Description of working environment, expectations from the company: Working environment is good, HR organizes celebrations of some festivals, and makes efforts for the company culture.	2017- 18- sem1
Mordor Intelligence, Hyderabad	Market research and Market Estimation Tools used (Development tools - H/w, S/w): MS Excel, MS Word, MS PowerPoint, and Data scrapping Objectives of the project: To prepare a market study as per client requirements Outcomes of the project: The market study report was completed and delivered to the client. Major Learning Outcomes: Learnt market estimation and prediction Brief Description of working environment, expectations from the company: Friendly mentors who to teach you right from scratch how to prepare market study reports. Academic courses relevant to the project: Market Research.	2017- 18- sem1
Mordor Intelligence, Hyderabad	I have worked extensively on report descriptions and table of contents of various global markets and also country specific markets. I have also worked on articles and samples of various markets like ~Global Beverage Packaging Market™. Later I was assigned the flash team, where also I worked on revamping the old report descriptions and table of contents. I have done secondary research to get the various missing points in the ME spreadsheet and make an extensive collection of information points. Tools used (Development tools - H/w, S/w): MS Excel Objectives of the project: Market study according to the requirements of the clients. Outcomes of the project: Extensive data collection for particular markets and successful delivery of reports. Major Learning Outcomes: Learnt how to do extensive secondary market research. Brief Description of working environment, expectations from the company: Engaging and helpful employees. It would be helpful if more students are given IC work rather than report descriptions and company profiles.	2017- 18- sem1

Company	Experience	Year
Mordor Intelligence, Hyderabad	Worked on regional analysis, segmentation and company profiles of reports Tools used (Development tools - H/w, S/w): PowerPoint, Excel Objectives of the project: Market Research Intelligence Outcomes of the project: Successful delivery of collateral Major Learning Outcomes: Excel, Market Analysis Brief Description of working environment, expectations from the company: Work environment is relaxed and only quality of work matters. The company expects you to provide quality output on time. How you go about it is irr elevent. Academic courses relevant to the project: Principles of Management	2017- 18- sem1
Mordor Intelligence, Hyderabad	Analyzed market and applied business models like SWOT, PESTLE, BCG matrix. Worked on market segmentation, company profiles, market estimation and forecast. Worked on more than 7 different reports and analyzed more than 30 global companies. Tools used (Development tools - H/w, S/w): MS Excel, Powerpoint and word Objectives of the project: To analyze market and present in report, studying about articles and annual reports Outcomes of the project: I got to learn how to approach and analyze problems and market Major Learning Outcomes: Market analysis skills Brief Description of working environment, expectations from the company: Friendly environment, Good managers, Guided all the time Academic courses relevant to the project: TRW, POE, Chemistry	2017- 18- sem1
Mordor Intelligence, Hyderabad	Involved in all the processes of the chain of a market research analysis of the Healthcare industry. The work entailed understanding the scope of the market globally, and involved intensive research - both primary and secondary - and making customized intelligence reports for the clients. Tools used (Development tools - H/w, S/w): Excel Objectives of the project: Making customized intelligence reports for the clients involving intensive primary and secondary research. Outcomes of the project: Made intelligence reports for clients on a demand basis. Major Learning Outcomes: Market Estimation Brief Description of working environment, expectations from the company: The company being a 4 year old LLC, almost every employee around is relatively new to the profile and the workplace. You get to be involved in the decision making and work alongside the employees in client queries & relations and grow as a consultant as the company grows and ventures into new directions. Academic courses relevant to the project: Business Analysis and Valuation	2017- 18- sem1
Mordor Intelligence, Hyderabad	To prepare market reports based on recent trends and developments in the Energy & Power sector across the world. Tools used (Development tools - H/w, S/w): Google and a desktop. Reports were prepared on Powerpoint or Word. Some use of Microsoft Excel was also there. Objectives of the project: To find out the recent developments and trends occurring in a particular market of a particular region. Outcomes of the project: Sale of reports. Major Learning Outcomes: Learned how to google things properly, how to write reports, how to maintain the flow in a report, improved my business language. Brief Description of working environment, expectations from the company: The working environment of the company was very good. The work timings were not very strict and the basic requirement of the company was to finish the work assigned to you that particular day and then only leave. There was very good bonding among the employees and the team leaders are very supportive. Academic courses relevant to the project: Technical report writing is the most important before coming here. Core disciplinary subjects would also very helpful. But there are sometimes topics beyond the scope of topics covered under the undergraduate degree but they can be still easily researched about on the internet. Doing Security Analysis and Portfolio Management would be little helpful for some specific projects although there is no guarantee that such projects would come again.	2017- 18- sem1
Mordor Intelligence, Hyderabad	Automotive market research, studied various aspects of the automotive market by components and different aspects. Made a report consisting of various sections highlighting the aspects of the market like drivers, restraints and opportunities in the market. Segmented every market by geography, type, technology. Tools used (Development tools - H/w, S/w): Java Script, microsoft office suite Objectives of the project: Study of various aspects of the automotive market to make reports that sell under the organisation. Outcomes of the project: Reports were made depending on the clients requirement. Major Learning Outcomes: Studied how to do market research in depth. Brief Description of working environment, expectations from the company: Relaxed environment with flexible timings. Very helpful employees. Academic courses relevant to the project: Market Research	2017- 18- sem1
Mordor Intelligence, Hyderabad	In short created Market Research Reports. Done miscellaneous in the company like creating samples, solved client queries. Tools used (Development tools - H/w, S/w): MS- Excel, MS-Powerpoint, MS- Word Objectives of the project: Market Research Outcomes of the project: Improved writing and analytical skills. Major Learning Outcomes: Data Mining, presentation skills, writing skills, analytical skills, handling client queries, time management Brief Description of working environment, expectations from the company: The work environment is very good. The employees are very friendly and tech lot of things. Academic courses relevant to the project: Technical Report writing and few disciplinary courses.	2017- 18- sem1

Company	Experience	Year
Mordor Intelligence, Hyderabad	The work assigned to me is Intelligence Centre(IC). In the IC, I had been assigned 4 countries which are Egypt and Nigeria from Africa and Brazil and Ecuador from South America.My initial work was to obtain data for crops and seeds of these 4 countries following production, Area harvested, Yield and Seed production. Second step was to get information on major players active in these 4 countries regarding their market share, Financials, new product launch and merger and acquisitions. After getting required data by primary and secondary research, I started the forecasting of these crops from 2017 to 2022 for each country. The forecasting is for Area Harvested, Production, Yield, Seeds production, Import and Export values and volumes. Some factor needs to be kept in mind while doing forecasting like the current trend, Historic trend, Drivers, Restraints, Government policies etc. Without having idea of these factors, The forecasting is as waste as raw data. I also got opportunity to work on linkedIn promotions, Marketing Deliverables, Company profiles,Rd and TOC etc. Tools used (Development tools - H/w, S/w): Microsoft Word, Microsoft Powerpoint, Microsoft Excel, LinkedIn and Google Objectives of the project: To get an knowledge how to prepare professionals report when working in an organisation of Market Research and having an idea of forecasting for any product. Outcomes of the project: In my 6 months of Internship, I got to know how to prepare an market research report with knowledge of preparing company profiles,Report Description, Competitive Landscape and Swot Analysis and hoe to write Press release, Articles, Infographics for Marketing promotions. Major Learning Outcomes: I got knowledge over Preparing company profiles, Competitive landscape, Report Descriptions, Table of Contents, Primary research, Secondary research. Brief Description of working environment, expectations from the company: I have definitely grown personally and professionally in more ways than I could have foreseen. The jugaad to keep comp	2017- 18- sem1
Mordor Intelligence, Hyderabad	Work is basically making market research reports for clients on which you are allotted some part of the report. Tools used (Development tools - H/w, S/w): Powerpoint, Excel Objectives of the project: To make Market Research Report Outcomes of the project: Market Research Report Major Learning Outcomes: Porter's Rule, PESTLE Analysis, SWOT Analysis Brief Description of working environment, expectations from the company: Working culture is good but work might become little boring after some time. So, try to learn different things in report. Academic courses relevant to the project: Fundamentals of Finance & Accounting	2017- 18- sem1

Experience Year Company Market research is the process of assessing the viability of a good or service through research conducted directly with the consumer which allows a company to discover the target market and record analyst opinions and other input from consumers regarding interest in the product. Market research may be conducted by the company itself or by a third-party company that specializes in the market research field. The PS station I am currently associated with, Mordor Intelligence, belongs to the latter category. Within the pyramid of market research, market modelling, building an intelligence center, analysing the strategies of leading companies, forms the foundation for all the other levels. The market research reports on food and beverage I am working on involves understanding the drivers and restraints for a specific market, segmenting the topic and understanding the major companies operating in the region. Tools used (Development tools - H/w, S/w): Intelligence Centers, Modelling Sheet, Market Estimation, Market Research, Repots, Top Down Approach, Bottom Up Approach, Logical Guesstimation, Analyst Views, MS-Excel (Advanced), CAGR, Primary Research, Secondary Research Objectives of the project: Intelligence Centers, in brief, are a combination of building comprehensive data and analysis of this data which help us in forecasting the trends of industry. Outcomes of the project: They contain exhaustive data which helps one arrive at various conclusions thus helping them in market related decision making. The flash reports emphasize on the understanding of the market based on the analysis done on the various segments in the 2017-Mordor Intelligence, market and the major companies operating in the market. Major Learning Outcomes: The scope of my 18-Hyderabad current project includes an exhaustive modelling sheet with 25-100 factors governing the final market sem1 value and analysis of the innumerable set of data available to arrive at a conclusion. However, the project is limited to the defined scope of market modelling and does not include embedded analytics and statistical modelling which would take the project to the next level of the pyramid. Embedded analytics is the technology designed to make data analysis and business intelligence more accessible by all kinds of application or user. This part is currently being handled by the technical team of the company, the foundation material for which is provided by the ICs. The flash reports include the understanding of the market through secondary and primary research and giving an overview about the drivers and restraints for the market and thus providing the client with the relevant information related to it. Brief Description of working environment, expectations from the company: Every company has a unique way to present their research reports. Mordor Intelligence reports have this particular style as explained in detail in this report. Due to this easy, simple and clear form of the report, the company is making huge revenues and grew substantially high from its beginning. The work environment at Mordor Intelligence is an absolute bliss-working with people your age gives you a confidence boost and a sense of responsibility to take on bigger projects. Academic courses relevant to the project: Management and finace courses, in addition to content writing and digital media courses as it makes the majority of the work here at mordor, that is, analysing, explaining and writing the content. Market research Tools used (Development tools - H/w, S/w): Excel, word, powerpoint. Objectives of the project: Market research Outcomes of the project: Details about the market which can help companies to 2017-Mordor Intelligence, take management decisions. Major Learning Outcomes: Basics of market research Brief Description of 18-Hyderabad working environment, expectations from the company: Company is only four years old, so work culture is sem1 somewhat similar to a start up. Management and employees are nice and are willing to help interns in doing the market research. I worked under Agriculture domain of Mordor Intelligence. During my initial months, I worked on Information Center (IC) which is a big database covering around 85 crops each in the countries, namely Uganda, Chile and Morocco. I used the data downloaded from FAO and UN Comtrade. Data was pertaining to Area harvested, production and import/export. Lastly, I forecasted the values pertaining to these data points up to 2022. The other major work involvement I had was related to the Company Profiles which mainly comprises of SWOT analysis in a particular market. During the period of my PS-2, I worked on more 2017-Mordor Intelligence, than 100 Company Profiles, covering various markets under the Agriculture domain. Tools used 18-Hyderabad (Development tools - H/w, S/w): MS Excel, MS Word Objectives of the project: Forecasting of the data sem1 related to major crops Outcomes of the project: I became proficient in advanced Excel and in Market Research. Major Learning Outcomes: Company Profiles, Pivot Tables, SWOT Analysis Brief Description of working environment, expectations from the company: My mentors were very friendly and accommodative. Work timings were flexible. PPO was less as the work in market research hardly involves much technical knowledge. Academic courses relevant to the project: Market Research, Principles of Economics, Fundamentals of Finance and Accounting, Economic Environment of Business

Company	Experience	Year
Mordor Intelligence, Hyderabad	The work involved researching of different markets (eg: India electric vehicle market) and preparing reports on them. It also included estimation of the present size of the market and future forecasts. Tools used (Development tools - H/w, S/w): MS Excel, MS Word, MS Powerpoint Objectives of the project: Market Research and Analysis Outcomes of the project: Prepared reports which helped clients in making their investing strategies. Major Learning Outcomes: Learnt to do the in depth analysis of markets and their trends. Brief Description of working environment, expectations from the company: The company has an open and transparent working environment. The work is done in teams and hence improves communication. Academic courses relevant to the project: Financial Engineering. Student	2017- 18- sem1
Morning Star - Index New Product Development , Mumbai	Worked on several APIs and services on AWS using various components like s3, dynamoDB, SQS, Athena, ECS, etc. Tool used (Development tools - H/w, S/w): Java, AWS, Springboot, Python, Junit5 Objectives of the project: To develop applications for internal clients Major Learning Outcomes: Cloud technologies, App development Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is great, flexible timings. Agile development is followed. Academic courses relevant to the project: C, OOP, DSA(not mandatory) Student	2019- 20- sem1
Morning Star - Index Operations , Mumbai	I worked on building indexes using SQL and Python. It is basically portfolio creation and weighting using Python by applying various filters on the initial universe of stocks like liquidity or marketcap and then selecting the top stocks and weighting them by float market cap or unique weighting. These are the kind of portfolios that we know as Sensex 30. We use SQL for getting the data and then build and backtest our portfolios using Python. Tool used (Development tools - H/w, S/w): Python, SQL, Excel Objectives of the project: The objective was to build an index Major Learning Outcomes: Index construction/Portfolio Construction, quant finance introduction, rules based portfolio creation, querying data and working with it Details of Papers/patents: Brief Description of working environment, expectations from the company: Good environment, friendly and helpful people, good work culture Academic courses relevant to the project: Derivatives and Risk Management, Computer Programming, Probability and Statistics, Optimisation, SAPM	2019- 20- sem1
Morning Star - Index Operations , Mumbai	I worked in New Product Development, Indexes. I initially worked on calculating float values by combing through annual reports. Then I worked on building a thematic index using python and sql. I built a monitoring system in sql for giving weekly updates on the condition of the databases and wrote scripts to streamline their data handling process. Tool used (Development tools - H/w, S/w): Python, sql, excel Objectives of the project: To build an economically viable index with good return/risk profile Major Learning Outcomes: I learnt a lot about the Indexing businesses and building indexes. Brushed up sql and python skills. Learnt soft skills and handling expectations of people around you. Details of Papers/patents: Brief Description of working environment, expectations from the company: They expect you to be interested and fast at picking up things. Work environment is nice. People are helpful. Academic courses relevant to the project: SAPM, Computer Programming, Derivatives and Risk Management, Probability and Statistics Student	2019- 20- sem1
Morningstar - Index Technology , Mumbai	Finance, Client presentation, Competitor mapping, Automation Tool used (Development tools - H/w, S/w):  VBA, Excel,SQL Objectives of the project: Automation Major Learning Outcomes: Finance and coding  Details of Papers/patents: - Brief Description of working environment, expectations from the company:  Vey good, friendly Academic courses relevant to the project: BAV, FM Student	2019- 20- sem1
MSCI	Simulation and Development of new Indexes especially FACTOR and ESG Indexes. Tool used (Development tools - H/w, S/w): Matlab, SQL Objectives of the project: Providing Indexes to Clients as per their needs Major Learning Outcomes: Passive Investment Strategies Brief Description of working environment, expectations from the company: It is a pleasant place to work. Co-workers are happy to help always. Expectations are not that high and no intense pressure to perform. Managers want you to learn as much as possible during the internship and happy to see you contribute. Academic courses relevant to the project: DRM, SAPM, FM Name: Kanish Kataria (2015A1PS0570P)	2018- 19- sem1

Company Experience Year

I was involved in several projects at varying levels. The work is focused on Index construction using some tools proprietary to the firm. I worked upon constructing modular assemblies for Index rebalancers, which are used to re-balance and reconstitute the index during annual, semiannual, quarterly index reviews. I was very frequently required to extract some data using MATLAB commands and SQL Database queries and analyse the results. I had to be thorough with Index Metrics and run IM Reports on the indexes available or constructed. Then, the analysis of IM Reports followed, which displays loads of information regarding the equity portfolio being managed through the index. There are multiple levels at which the Index construction and validation takes place. Apart from the index construction, I was involved in testing the newly devised RACs (Reusable API Components), used in the modular framework. RACs are the building blocks of a typical modular assembly and perform a multitude of operations on different data types. All these data types are used in portfolio synthesis and weighting. I implemented a few Index methodologies in the modular framework and verified the successful working of the rebalancers. Index customization is undertaken at different levels, to look for desired performance in terms of risk-return attribution, tracking error and turnover according to the client demands. Tool used (Development tools - H/w, S/w): MATLAB, Excel, SQL Database Objectives of the project: NPD (New Product Development and Research) Major Learning Outcomes: Technical Proficiency, working of Indexes and ETFs, rising trend in Passive Investing, Equity Portfolio Management, communication skills and professional ethics, better understanding of the corporate structure, exposure to the inside working of finance and investing Brief Description of working environment, expectations from the company: MSCI has a very friendly and comfortable working environment, owing to the welcoming attitude of the people working here. The people here are amazing, they helped me in every possible way to get started and blend in. They made it feel like home. The work life balance is good, the work hours are not harsh, it's very exciting to endure along. Everyday is a new day, one can expect a new task everyday, which breaks the monotony and makes the work all the more involving and exciting. I learnt a lot during my internship, while developing very good interpersonal relationships and equations with my colleagues, teammates, and senior management. A cheerful atmosphere co-exists with an air of professionalism. It is a great place to make friends, enjoy during the outings and corporate parties and most importantly, become a part of the herd, which mutually benefits everyone in the long run. One can expect to learn a great deal and develop and grow in many different ways. On a professional front, MSCI boasts the reputation of being the biggest player in its industry, so that said, it adds up a lot on one's profile. Academic courses relevant to the project: Security Analysis and Portfolio Management, Business and Asset Valuation, Financial Management Ltd, Mumbai

MSCI

2018-19sem1

types and understanding the necessary terms and conditions required to describe the holdings in the client™s portfolio. Assisting clients with data conformance and validation testing, especially checking input files for proper formatting and appropriate content for modelling and using processing logs to analyse the portfolio for accuracy and completeness. Confirming data coverage for the securities and benchmarks that a client wishes to model, including analysing the requirements and working with internal teams responsible for maintaining our datasets.. Tools used (Development tools - H/w, S/w): WinSCP, BarraOne, RiskManager, Salesforce Objectives of the project: Client onboarding for our analytical products and services and generating custom regulatory reports. Outcomes of the project: I have been involved in addressing client queries and executing deliverables which provide solutions at the client's end and adequately meet requirements to their extent of satisfaction. Major Learning Outcomes: ¢ Developed a fair expertise in using our proprietary softwares: RiskManager and BarraOne. ¢ Improved my soft skills through regular client interactions. ¢ Learned a lot about complex instrument types and ways to modeling them. ¢ Enhanced my management skills such as ownership of responsibilities, adhering to stringent guidelines and a welcome exposure to the corporate work culture. Brief Description of working environment, expectations from the company: I came to MSCI as a part of PS II, to learn and gain

knowledge in the field of finance. But as fate would have it, I was a part of the Implementation Services team. So, it was overall a new area to explore for me and I had a good PS II experience. In terms of learning, the experience has been nothing short of terrific. The time spent at PS2 has been a great teacher in various spheres, including but not limited to understanding corporate life, expert guidance, apprehending new technologies and their developments and building a great character. The internship has helped me understand the dynamics of a corporation; in particular with the formal communication skills, organizational hierarchy, punctuality and many more, which are best learnt in a workplace. Academic

Mastering and explaining the different input data formats and content requirements for all instrument

MSCI (Global Implementation Services), Mumbai 2017-18sem1

courses relevant to the project: DRM, SAPM, FinE, FinMan. Student

Company	Experience	Year
MSCI (Global Implementation Services), Mumbai	Construction of different financial indexes. Mainly work consists of writing assembly code that required data from database and produces a index with weights assigned to a particular set of securities. Other tasks include testing of such assemblies developed by others for dual validation purposes. Tools used (Development tools - H/w, S/w): Matlab, Excel, SQL Objectives of the project: Writing assembly code for a particular index Outcomes of the project: A portfolio with weights assigned to a set of securities Major Learning Outcomes: Financial markets, factor indexes, thematic indexes Brief Description of working environment, expectations from the company: Positive work environment, very friendly people Academic courses relevant to the project: SAPM, Financial Management, DRM Student	2017 18- sem1
MSCI (Solution Management), Mumbai	Built client kits, developed risk reports, optimised server management, and designed workflows Tools used (Development tools - H/w, S/w): Eclipse, xmlspy, many web applications Major Learning Outcomes: Learnt how the industry operates. Very crucial exposure, very informative. Developed soft skills Brief Description of working environment, expectations from the company: Very friendly environment with a rich and professional work culture. Student	2017 18- sem1
MSCI, Mumbai	i. Develop an understanding of the various factor indexes. ii. Analyze the results and check the relative performance of the simulated indexes to match the existing ones. iii. Validate the results and match the constituents and weights with the existing indexes in production. Tools used (Development tools - H/w, S/w): MATLAB, Excel, SQL, Git, MSCI Proprietary Tools Objectives of the project: Construction and Maintenance of new/existing factor and thematic indexes Outcomes of the project: Construction and Maintenance of new/existing factor and thematic indexes Major Learning Outcomes: 1. Factor Investing 2. Thematic Investing 3. Coding in MATLAB/SQL 4. Proprietary Software 5. Index Construction and Maintenance Brief Description of working environment, expectations from the company: MSCI working environment is very good. The team is very friendly. The company expects you to understand the index construction and maintenance process in detail so that you can contribute to the work there.	2016 17- sem1
MSCI, Mumbai	Worked for the Index Management Research team. Tools used (Development tools - H/w, S/w): MATLAB, SQL, and Excel Objectives of the project: Develop an understanding of thematic and factor indexes.  Outcomes of the project: Developed an understanding of thematic and factor indexes. Helped the team with quarterly and semiannual rebalancing of indices. Major Learning Outcomes: Learned how to code in MATLAB and SQL. Brief Description of working environment, expectations from the company: Great environment, great colleagues. Excellent opportunity to learn.	2016 17- sem
MSCI, Mumbai	Project -1: Index Creation Research on environment based indices are seen as the latest trend setters and a mini-study on Factor metrics Specializing in single factor equity indices (Value, Low Size, Low Volatility, Momentum, Quality and Dividend Yield) and Diversified multi factor indices Integrating ESG into single factor indices, performance measurement and attribution; integrating ESG into a highly diverse set of benchmarks to accommodate a broad spectrum of sustainable investing mandates. Project -2: Portfolio Optimization Creating multifactor indexes by setting an optimization with tracking error constraint along with other constraint using Barra Portfolio Manager; quarterly rebalancing the index Formulating a typical mean-variance portfolio optimization in Barra Optimizer, based on client's constraints Tools used (Development tools - H/w, S/w): MATLAB, JSON, Git, SQL Objectives of the project: Creating and managing new factor and ESG based indexes based on on-going research and client requirements Outcomes of the project: Helped in transitioning certain indexes from old ERP to new modular format. Most of the indices that I was working on, were either research, that will be presented to clients for further comments and finally sent to production, or custom indices that were client's requests. The clients include some of the largest asset management companies and institutional investors. Major Learning Outcomes: A. Market Research B. Active Portfolio Management C. Passive investments D. Following deeper insights into the drivers of performance and risk in a portfolio, broad asset class coverage and innovative research E. Data analytics Brief Description of working environment, expectations from the company: The timings are flexible, and the team is very helpful. The work culture is quite strict, and expects strict adherence of corporate culture within the organization. Have a strong understanding of core subjects in finance like Security Analysis and Portfolio Management, Equity Research and Financial Engi	2016 17- sem <sup>2</sup>

Company	Experience	Year
Multi Commodity Exchange of India Ltd., Mumbai	Developed an in house testing platform for the exchange. Developed a web based application to maintain defaulter database. Worked on integrating single sign on facility at the exchange. Tools used (Development tools - H/w, S/w): Maven, Gradle, Vaadin, Keycloak. Objectives of the project: To develop applications to be used by various trading members of the exchange and in house exchange executives. Outcomes of the project: Applications in testing to be used on a later date to be deployed on the MCX's website and internal servers. Major Learning Outcomes: Applications in testing to be used on a later date to be deployed on the MCX's website and internal servers. Brief Description of working environment, expectations from the company: Great working environment. Friendly managers encouraging you to work up to the best of your capabilities. Academic courses relevant to the project: Object Oriented Programming, Database Management System	2017- 18- sem1
Multi Commodity Exchange of India Ltd., Mumbai	The report focuses on various hedging strategies that the hedgers can use to manage price risk. All these strategies can be classified into three types, namely, reducing the price volatility, having a favorable price in a stable market and lastly establishing a price range. In the end, this report also gives an insight into how speculators can use options to make a profit. Tools used (Development tools - H/w, S/w): Excel Objectives of the project: different types of hedging strategies using options in commodities Outcomes of the project: As we have seen, this report focuses on various hedging strategies that the hedgers can use to manage price risk. All these strategies can be classified into three types, namely, reducing the price volatility, having a favorable price in a stable market and lastly establishing a price range. In the end, this report also gives an insight into how speculators can use options to make a profit. Major Learning Outcomes: Some recommendations which can increase participation of hedgers in options trading are: 1. Less premium and brokerages should be charged so that hedgers can get more leverage on commodities and hence less loss because the maximum amount of loss in options trading generally equals the premium and brokerages paid. 2. The Government should impose restrictions on speculators so as to decrease volatility in options market. Details of papers/patents: Research to be used by MCX. No paper can be published Brief Description of working environment, expectations from the company: Working environment is excellent. MCX motto is 'Trade with Trust' and they surely live up to it. Academic courses relevant to the project: ECON F315 Derivatives & Risk Management Student	2017- 18- sem1
Multi Commodity Exchange of India Pvt	1. Research & Development of the new delivery settlement system for the purpose of hedging from the preexisting cashsettled system. Identification of the new business prospects of the existing clients and the upcoming mining areas for development of the exchange run warehouses thereby reducing the transportation and inventory costs. 2. Not all the cotton related companies perform hedging activities on exchanges due to slightly more traditional performing of textile industry and a few misconceptions about markets. This project aims to show those companies how hedging will be beneficial for their finances. Tool used (Development tools - H/w, S/w): MS Excel, MS PowerPoint Objectives of the project: 1. Form a database 2. Preparing a model showing hedging benefits Major Learning Outcomes: 1. Way an exchange works 2. Hedging strategies 3. Fundamental Analysis of Financial Statements Academic courses relevant to the project: 1. Fundamentals of Finance and Accounting 2. Financial Management 3. Derivatives and Risk Management Name: Sabhyata Shukla (2014B3A80591G) Tool used (Development tools - H/w, S/w): MS Excel, Powerpoint Objectives of the project: Research on the Metals Industry, Cotton textiles Industry, Develop new hedging strategies Major Learning Outcomes: How to formulate hedging strategies as per the needs of the clients Academic courses relevant to the project: Financial Management	2018- 19- sem1
munshiG Private Limited	Business development (4 months) and Technical work[Admin Panel(1 month)] Tool used (Development tools - H/w, S/w): Sublime,Excel,Python IDE,Github,Slack Objectives of the project: Developing a Dashboard which articulates the company position and statistics in the market. Elucidate the overall development of the company. The business development encompass the pitching(Sales + Marketing) and management work. Major Learning Outcomes: Management, Technical Skills,Time Management(Have worked in BD team and technical team abreastly for one month). Brief Description of working environment, expectations from the company: Nice environment, have experienced the startup culture. I want to work on the technical side for at least 2 months to learn a bit more but unfortunately, it couldn't happen. Overall, my communication skill got improved, which instilled me with immense confidence. I loved the journey a lot, irrespective of the dynamic ups and lows we have faced in preceding 4 months. Name: PRAKHAR GANDHI (2015A8PS0456H)	2018- 19- sem1

Company	Experience	Year
munshiG Private Limited	Made ML model, Machine Learning models initially uses data to make outcomes that doesn't meet the need, then slowly improves using various inputs that it has never seen before and become better overtime. The advantage of this is even if the model is initially faulty, we can make it better overtime (by feeding it more outputs). And also we don't need to train the model again from scratch. Tool used (Development tools - H/w, S/w): Hardware: Virtual environment used for python on Ubuntu Software: barcode studio,octoparse Objectives of the project: To take the data related to barcodes and do analysis on it Major Learning Outcomes: Contributing in making other changes to meet the expectations of people and push everyone beyond their current limit. Doing database management using python (also, Using modules of JavaScript). Brief Description of working environment, expectations from the company: we need to listen to other people's inputs by following CJM(Customer Journey map) and include our own instincts as well to make a choice. Academic courses relevant to the project: Database systems	2018- 19- sem1
My POS Technologies Pvt. Ltd., Mumbai	The project was to develop a web application that connects retailer with the distributors. The idea behind the project was to make the on-line business platform for the retailers and Distributes of the Pharmaceuticals product. Once a retailers has signed-in our application he has access to all the distributors registered in our application. He can search for all the distributors selling a particular product and compare the prices they are offering. He can also place the order though our application. A distributor can add discount schemes to the product to attract the retailers. The application is an order management platform which facilitates the giving and taking of orders. It makes the retailers and distributors more independent and also led to increase in scope of their business. Tools used (Development tools - H/w, S/w): Node, HTML, CSS, Java Script, Angular. Objectives of the project: Develop web application to facilitate order placements by the retailers to the distributors of the pharma products. Outcomes of the project: Web application enabling retailers to place the order to the distributors with out help of any broker. Major Learning Outcomes: Learned about web development, Data base management. Brief Description of working environment, expectations from the company: Being an startup there where lots of learning opportunities in the company. I got a better Idea about how the industry works. Coworkers where supporting and always ready to help. Academic courses relevant to the project: Intro to programming, DSA, DBMS and OOP Faculty Comments: Expectations from industry: The work is more related to learning systems which involves dealing the dynamic data bases. Students are expected to know about the data bases and also building learning models out of these. Student	2017- 18- sem1
My smart price, Hyderabad	Software development - Backend coding in PHP to write two mailer codes. Developing extensive database for Mutual Fund Comparison project. Tools used (Development tools - H/w, S/w): S/w - PHP, Composer, MySQL, JS, and HTML. Objectives of the project: -To get Page speeds of most visited URL's daily to Analytics and SEO team To get Ranking of keywords and change in them with respective to the day before and last week's average to SEO team To lay foundation (creating extensive database) for Mutual Major Learning Outcomes: Very proficient in PHP and backend coding, HTML, CSS, MySQL. Brief Description of working environment, expectations from the company: Working Environment was good.	2016- 17- sem1
My smart price, Hyderabad	Development of MySmartPrice Desktop Application for Windows System. Tools used (Development tools - H/w, S/w): Electron along with npm packages. Objectives of the project: To make a basic Windows desktop application which can be easily updated whenever needed. Outcomes of the project: Project was successfully developed and launched on the official website. As of now more than 600 users have downloaded and installed it. Major Learning Outcomes: How to work under a product manager and feel of corporate environment. Brief Description of working environment, expectations from the company: They gave a major individual project which was later released on their official website. All this was much more than expected. Overall the work environment was friendly and productive. Student	2016- 17- sem1
My smart price, Hyderabad	Backend analytics, created a dashboard using SQL, PHP, JAVASCRIPT Tools used (Development tools - H/w, S/w): Php, SQL Objectives of the project: To create strategies for profit increment Outcomes of the project: Successfully created the dashboard Major Learning Outcomes: Php, SQL, JAVASCRIPT Brief Description of working environment, expectations from the company: Flexible environment Academic courses relevant to the project: C Programming Student	2017- 18- sem1

Experience Year Company Development of an entire industry level functional app for mobile platform takes in strategic planning and structured approach. Not only is designing the front end (the User Interface) and backend (API's) an important task, but their seamless integration is also a vital part of the development phase. This project is focused on development of such an inbound application for the buyers in Myntra team who currently do not have a well-defined procedure for rating and selecting which styles and brands to buy for the upcoming sales season. After a lot of thought and planning that had been put into the app, the platform decided to be react-native for UI development and java spring framework for backend development. The UI part is planned to be ready by October and thereafter the work on backend will be taken up. The application has mostly been coded in ES6 and JavaScript and is primarily focused on android platform for MVP release. This project will help the buyers to be able to keep a handy reference of all roadshows they visit and it will also store the information regarding the styles available in the roadshow, the trends particular to it, and the collections available in a particular roadshow. Finally, I made the entire roadshow app that could work connected to the internet and could save and fetch data from DB, for which I used 2016-Myntra.com, Bangalore Spring Hibernate MVC framework and deployed the services on docker container in one of the AWS 17machines in the company. Tools used (Development tools - H/w, S/w):React Native, Spring Hibernate MVC sem1 Framework, Docker, HA Proxy Objectives of the project: To be able to deliver a fully functional application for streamlining the grading process of the inventory, the company need to buy for the next season. Outcomes of the project: Delivered the app with additional features than provided on the Product Requirement Document. Major Learning Outcomes: Learnt a lot of business stuff, particularly designing a product from the scratch, learnt new JavaScript frameworks and libraries like React Native, and backend development using Spring Hibernate MVC framework, and modular programming strategy. Brief Description of working environment, expectations from the company: Working environment is pretty good, as the company allows full freedom and opportunity of going on and exploring stuff, and learning and working on new technologies, adapting new programming strategies while also providing a wellestablished timeline to complete the work assigned. Although the company doesn't expect much of knowledge from the interns, it will be a lot better if the assigned interns have a good understanding of OOP concepts and JavaScript and modular programming. Made the entire First Mile Logistics which included one app, web ui and web services. Tools used (Development tools - H/w, S/w):Android Studio, Spring, Hibernate, Ext-js Objectives of the project: To implement an online process for the entire First Mile so that a unified approach can be followed 2016throughout the country. Outcomes of the project: First Mile online flow implemented successfully pan Myntra.com, Bangalore 17-India Major Learning Outcomes: Android, Java, Spring, Hibernate, Cross-team collaboration Brief sem1 Description of working environment, expectations from the company: It was a great experience. I got to learn a lot. It did not only help me grow in my knowledge of Computer Science but also as person. It is rare that an intern gets a project that has long term impact but Myntra provided me an opportunity to do so. Worked on the in-house Comex System which is a notification engine to send triggered emails, push and in app notifications to the customers. During the internship, I helped upgrading this existing platform by adding different kinds of functionalities that were non-existent before I came here. Apart from these, I also independently managed and executed numerous campaigns using this system for customer acquisition. Tools used (Development tools - H/w, S/w): 1. Python 2. Django 3. Django Rest Framework 4. Celery 5. Jinja2 6. Pytest, Mock and Monkeypatch Objectives of the project: 1. To develop a functionality that displays web content in notifications/emails as preferred by the customers and adapts itself according to changing customer preferences at any later point of time(AB Testing). 2. To provide different coupons to the customers by analyzing their behavior as different customers have different preferences and hence 2016improve upon the gross margin. Outcomes of the project: 1. The AB Testing functionality has been Myntra.com, Bangalore 17implemented and other teams are testing its impact. 2. The Personalized coupons campaign is launched sem1 where we provide customers with coupons of different configuration rather than coupons with flat discount. 3. Various other campaigns to attract customers to make their next purchase who have been inactive for a long time. Major Learning Outcomes: 1. Working with different teams on the same project 2. Code testing by mocking different kinds of classes and methods 3. Task Scheduling using Celery 4. Web application creation using Django 5. API creation using Django Rest Framework Brief Description of working environment, expectations from the company: It was awesome working at Myntra Designs. Got an opportunity to improve communication skills to a great extent. This might be the most professional working place where I always work with passion and have fun at the same time. Overall it was a good workplace experience.

Company	Experience	Year
Myntra.com, Bangalore	Created a desktop app for testing services by creating a production like environment on the local laptop using docker. Tools used (Development tools - H/w, S/w):Go, docker, JavaScript, HTML, JSX, ReactJS, CSS, Shell Objectives of the project: To speed up the testing process and provide a uniform testing environment for the developers. Outcomes of the project: This project reduced hardware AWS support and increased the testing process by 4 times. Major Learning Outcomes: Golang, Web development, optimization of space and time Brief Description of working environment, expectations from the company: Myntra has a working environment which encourages us to work hard and have fun in the same time. Fun at Work is Myntra's motto. Everyone is very encouraging and helpful too. Student	2016- 17- sem1
Mytrah Energy	Day to day activities included during area estimation, module layout using AutoCAD. Apart from that I have completed two projects one is static structural analysis of module mounting structures and second is solar irradiation estimation. Tool used (Development tools - H/w, S/w): AutoCAD, Creo, Fusion 360, Objectives of the project: Analysis of Module mounting structures, solar irradiation estimation, and survey for estimating the capacity using Google Earth pro Major Learning Outcomes: Learned a lot about bidding, procurement and execution of a solar rooftop project Academic courses relevant to the project: MDD, mechanics of solids	2018- 19- sem1
NAL Bangalore	Most of the work involved simulation and modeling. An oxygen sensor design was to be simulated to optimize various parameters so as design a diffusion barrier, which can be placed on the sensor. Some designs for micro heaters were also optimized. Tool used (Development tools - H/w, S/w): Comsol Objectives of the project: To design a micro heater and optimize the parameters for a diffusion barrier design Major Learning Outcomes: Simulations and analysis Brief Description of working environment, expectations from the company: The working environment is very good. One of the best PS-2 station for students who wants to work in R&D sector and learn how things work. The process of a task is a little slow because of the administrative shortcomings. But you can learn a lot while you are here for your PS-2. Academic courses relevant to the project: CFD Student Name: Kavan Sheth Tool used (Development tools - H/w, S/w): Physical Vapour Deposition, Magnetron Sputtering, SCOUT, Origin. Objectives of the project: Developing a spectrally selective solar thermal absorptive coating Major Learning Outcomes: Hands on experience with Sputtering and thin film deposition processes. Details of Papers/patents: Working on writing a paper. Brief Description of working environment, expectations from the company: Very friendly environment with all the required facilities for research. Academic courses relevant to the project: Nanochemistry. Student Name: Ajay Gogineni	2018- 19- sem1
National Aerospace Laboratories, Bangalore	A login sample website implementing 3 - Tier Architecture using ASP.NET, C#, ADO.NET, SQL. A GUI Application to connect to Microsoft Team Foundation Server and the Work Items based on certain filters. It was done using ASP.NET and C#. A Web Application which has two dashboards for the two teams, which displays the required graphs to give the overview of progress of the teams. It also includes feature to track Bug Change History tracking which helps in tracking the work progress of both the teams. Tools used (Development tools - H/w, S/w): ASP.NET, ADO.NET, C#, SQL, HTML, CSS, BOOTSRAP, REST API with Visual Studio. Objectives of the project: Outcomes of the project: The main objective is to track the progress of work done by the teams in Aurigo. Outcomes of the project: The company now has the provision to track the progress of the work done by the teams very easily with the Sprint Metrics website which also includes graphs in dashboards for quick reference. Major Learning Outcomes: Web Development and Windows Application development using ASP.NET and C#. Brief Description of working environment, expectations from the company: Work Environment here is very good and the best one I have experienced. All the employees are very friendly and we have a gaming room to reduce the stress. There are many cultural activities held by the company. They also organized a trip during our PS-II. We are having a flash mob for Christmas but we wouldn't be attending it. Overall it was a great experience for me and Aurigo Software is a great place to work. Academic courses relevant to the project: DBMS, Computer Networks.	2017- 18- sem1

Company	Experience	Year
National Aerospace Laboratories, Bangalore	1). Login Sign-Up website Implementing 3-Tier Architecture Model. Tools used were Asp.Net, C#, SQL, Ado.Net, Bootstrap. 2). GUI Application to get work items of the Projects by connecting to Microsoft Team Foundation Server. Tools used were Asp.Net, C#, Web APIs. 3). A web based dashboard for the company to track the sprint metrics. Tools used were Asp.Net, C#, Bootstrap, c3.js, d3.js, json. Tools used (Development tools - H/w, S/w): Asp.Net, C#, SQL, Ado.Net, Bootstrap, c3.js, d3.js, json Objectives of the project: Outcomes of the project: To build a sprint metrics dashboard for the Aurigo Software. Outcomes of the project: The project would help the Aurigo web and mobile team to track the work items and plan for the next sprints accordingly. This tool would be helpful to project managers also as they can get the overview of the work done by the team members. Major Learning Outcomes: Learnt Web application development, Windows application development, Microsoft TFS and related WIQLs. Brief Description of working environment, expectations from the company: Aurigo Software has a great working environment. Team members will always be there to assist in every possible way and make sure we don't get stuck and at the same time we are not spoon fed everything. Mentor assigned to me by the company helped be to become well versed in learning new languages. A long list of extracurricular activities were held during my stay and they sure are fun and help in team building. Academic courses relevant to the project: DBMS, Computer Networks. Faculty Comments: Expectations from industry: These stations look for computer science students having knowledge on Java, Python and if possible web development experience. Also good analytical skills, decision making and communication skills. Student	2017 18- sem1
National Aerospace Laboratories, Bangalore	1. To create a chatbot that can assist an auditor while performing analytical procedures during the audit. It has a natural language interface and supports dynamic and interactive graphs. 2. In fraud analysis the aim is to provide as a rich a subset for testing as possible so as to reduce the risk for the auditor when they give their opinion on a company by making the ease of finding fraud very high. 3. Image processing aims to track humans and inventory objects to document interactions and hence provide intelligence to the store owners or managers in terms of deployment of security personnel, stock etc. Tools used (Development tools - H/w, S/w): Think pad laptop provided by organisation, python, NLTK, Flask, HTML/CSS, JavaScript, DC.js, D3.js, CrossFilter.js Objectives of the project: 1. To create a chatbot that can assist an auditor while performing analytical procedures during the audit. It has a natural language interface and supports dynamic and interactive graphs. 2. In fraud analysis the aim is to provide as a rich a subset for testing as possible so as to reduce the risk for the auditor when they give their opinion on a company by making the ease of finding fraud very high. 3. Image processing aims to track humans and inventory objects to document interactions and hence provide intelligence to the store owners or managers in terms of deployment of security personnel, stock etc. Outcomes of the project: The solutions will help improve the digital drive in EY and will help build stronger cases for client pursuits. Major Learning Outcomes: 1) Learnt Flask, DC.js, NLTK, Python, Machine Learning concepts like Once Class SVM and Isolation Forest 2) Created a bot with interactive UX and charts 3) In fraud multiple algorithms were tested and evaluated. Isolation Forest was evaluated as the best one Brief Description of working environment, expectations from the company: Professional, Ideas are allowed to grow, access to resources, Expected to work in tight deadlines Academic courses relevant to the project: Pro	2017 18- sem1
National Centre for Biological Sciences , Bangalore	I genotyped hundreds of mice, collected tissues from a few narrowed down genotypes, fixed the tissue in paraffin blocks, Sectioned them, Stained and mounted them and observed them for physiological changes. Tool used (Development tools - H/w, S/w): Polymerase Chain reaction, Agarose Gel Electrophoresis, Paraffin Tissue Fixation, Tissue Sectioning, Hematoxylin and Eosin Staining. Objectives of the project: To analyse tumours in genetically engineered Pancreatic tumour mice and stage them. Major Learning Outcomes: Learnt a lot of Biochemistry techniques and tissue processing Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: The work environment is extremely comfortable, everyone is very helpful. You are expected to be on time, be regular, be mindful of your peers, put effort into learning, participate in weekly discussion and contribute ideas. You should practice hard and pay attention when being taught so that you can start working on your own as fast as possible. Academic courses relevant to the project: Molecular Biology, Biological Chemistry, Anatomy Physiology and Hygiene, Biochemistry, Instrumental Methods of Analysis, Microbiology, Medicinal Chemistry	2019 20- sem

Company	Experience	Year
National Centre for Biological Sciences , Bangalore	To optimize the over expression and purification of MCPH1 tBRCT protein to screen small molecular inhibitors targeting its phospho serine recognition through High Throughput Screening. Tool used (Development tools - H/w, S/w): AKTA Avant and Pure, TECAN Freedom EVO, Nanotemper Monolith nt.115 Objectives of the project: Optimizatoin of Overexpression and Purification of MCPH1 tBRCT protein. Major Learning Outcomes: Protein expression and purification techniques Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: The work culture is friendly, relaxed and productive. Seniors are open and honest for the communication and also are supportive, cooperative. State of the art facilities were provided. Academic courses relevant to the project: Microbiology, Pharmaceutical Biotechnology, Biochemistry. Ballabgarh Student	2019- 20- sem1
NATIONAL CHEMICAL LABORATORYPUNE	Modelling and simulation of a biomass gasifier using ANSYS FLUENT and analyzing the output of the fluidized bed under controlled environment. Tool used (Development tools - H/w, S/w): ANSYS FLUENT Objectives of the project: analyzing the output of the fluidized bed, i.e syn gas. Major Learning Outcomes: Learning a new software which is used in many industries, understanding the working of fluidized bed reactor and using biomass for the production of syn gas Academic courses relevant to the project: Thermodynamics, Heat Transfer, Mass transfer Research, New Delhi	2018- 19- sem1
National Council for Cement and Building Materials ,	In this project, various blends of Portland Limestone Cement were made with varying percentage compositions of clinker, limestone and gypsum. Then, the physical and mechanical properties of these cement blends were tested as per procedures mentioned in various IS and ASTM codes. After that, the concrete made from these cements were tested for their fresh properties (such as slump, setting times, bleeding, workability) and hardened properties (such as compressive and flexural strengths, drying shrinkage, modulus of elasticity, density) and durability studies were performed on them. Tool used (Development tools - H/w, S/w): No hardware or software tools were used. Objectives of the project: To design an IS code for Portland Limestone Cement. Major Learning Outcomes: Important tests to be performed to check the durability of concrete were learnt. The importance of precision of data and testing accuracy and knowledge of test procedures and conditions for an R&D project was observed. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work schedule is busy but organized. Individuals are expected to be punctual and disciplined. Target to complete tasks is given at the start of the day and accomplished tasks and backlog are expected to be reported at the end of each day. Academic courses relevant to the project: Construction Materials	2019- 20- sem1
National Council for Cement and Building Materials ,	Designed methods for energy conservation in Indian cement plants Tool used (Development tools - H/w, S/w): MATLAB, MS Office Objectives of the project: Recovery & Utilization of waste heat energy Major Learning Outcomes: Energy Audit for big scale plants Details of Papers/patents: Brief Description of working environment, expectations from the company: They provide a variety of impactful projects (including working on Govt policy and regulation changes for cement industry) for all core branches. Academic courses relevant to the project: Heat Transfer, PDP2 Brief write-up on PS-II station: The students are working in the area of verification/Validation, Reducing Cycle Time for Build Quality Feedback through Enhancement in Hardware & Software Infrastructure, Testing and implementation of Advance eXtensible Interface Weighted Random memory Delay Module, Designing a wrapper component for CPUs, Providing Power support and managment capability from the firmware level to kernel level for latest hyperthreaded CPU Architectures designs of ARM etc. The students were given training on Labview in National Instruments. Students worked on various tools and languages like C, python, Linux/UNIX, verilog, computer architecture, shell scripting. Awareness of scripting languages, programming concepts and Computer Architecture are the areas the organisation is looking at for the various projects. Student	2019- 20- sem1
National Council of Applied Economic	I got a chance to work on the project "Study of Gems and Jewellery Sector of India". We attempted to be an impartial observer of the policies implemented by government and how positive changes can be brought in the sector. It taught me the right frame of mind to approach policy analysis. My primary work was related to primary and secondary data collection, management and analysis. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Map and measure the health of various clusters across Gems and Jewellery Sector in India. Major Learning Outcomes: Learnt aspects of Gems and Jewellery Sector (across India and internationally), worked on improving excel skills and got a close insight of policy making process. Brief Description of working environment, expectations from the company: Working hours are rigid, but the working conditions are lax. Good colleagues. Some days involve lots of menial work like photocopying and scanning documents. You get to attend some amazing conferences and listen to world class speakers like former Chief Economic Adviser to GoI. The onus will be on you and it's up to you to extract the best out of NCAER. Academic courses relevant to the project: Econometrics, Public Policy	2018 <sup>-</sup> 19- sem1

Company	Experience	Year
National Entrepreneurship Network	Data analysis and providing backend support for operations of foundation based in South-East Asia. Tool used (Development tools - H/w, S/w): Excel, Qlikview Objectives of the project: To provide back-end support to operations in Southeast team. Major Learning Outcomes: Data analysis for business decisions Brief Description of working environment, expectations from the company: Fine. Name: Nithin Raj (2015A4PS0320P)	2018- 19- sem1
National Entrepreneurship Network	The project work was a two-step process. The first one was to identify media outlets of any kind which would help the organization have a wider a reach. The second project involved devising a PR strategy to engage and retain the audience who were reached thorough the first step. Tool used (Development tools - H/w, S/w): SimiliarWeb, Adobe Analytics, Excel, Google Analytics, Brand24 Objectives of the project: 1.  Mapping of PR beats. 2. Analysis of PR trends Major Learning Outcomes: Thorough understanding of the PR activities undertaken by various organisations and publications that be used to achieved maximum impact of these PR activities. Brief Description of working environment, expectations from the company: The working atmosphere in the organisation is extremely good. There was constant support and guidance at each step from various team members. Even the members outside my team were willing to help out. The organisation expected us to understand the strategies adopted by them to publicise the service they provide and suggest changes which could make their marketing even more effective. Academic courses relevant to the project: Digital Marketing, Marketing and Media Name: Tarun Baloda (2015A1PS0679P)	2018- 19- sem1
National Entrepreneurship Network	I was part of Global Impact and Partnership Team during my internship. I worked under Mr Austin Thomas and Ms. Ritu George. At national entrepreneurship network, there were different programs that organized different programs for e.g. GTI (Global Training Institute) who handled FDP (Faculty Development Program), VSU(Venture ScaleUp Unit) which was handled by different Regional Managers and NEN team which overlooked all the entrepreneurship programs run in different colleges across India. My role in my team was to conduct and also design surveys for all the students and faculties of GTI and NEN team which included quarterly or monthly surveys and perform data analytics using MS Excel for the data obtained and share with the teams regularly to tell them how the program was running and were students and faculties liking it or not and how they can improve it and other things. My work also included video editing for feedback videos from different startups or SMEs. Tool used (Development tools - H/w, S/w): MS-Excel, MS Power Point Objectives of the project: Design and Implementation of Global Impact Surveys, Tracking ongoing surveys and Data Consolidation and reporting to all ecosystem shareholders Major Learning Outcomes: MS-Excel, MS-Powerpoint and Softskills Name: Ricky Sharma (2015A2PS0611P)	2018- 19- sem1
National Entrepreneurship Network	Majorly data handling and entry work in long term but first 2 months were completely based on learning of entrepreneurship concepts, meeting entrepreneurs, visiting incubators and accelarators and much more. Well, it all depends on which team you are assigned. I was assigned GTI Team which had major work of running an entrepreneurship program for faculties in different countries. Sometimes there's a lot of work but most of the times there is very lite to no work. So if you want to learn something other than entrepreneurship then I would not recommend this PS station. Most of the times the work given is not upto your potential and you feel like wasting time. Work like calling people to gather some information, Too much of copy paste in excel sheet, etc. Tool used (Development tools - H/w, S/w): MS Office, online sources. Objectives of the project: Establishing key metrics for faculty development program Major Learning Outcomes: Entrepreneurial mindset and knowledge Brief Description of working environment, expectations from the company: People are good. Mostly there'll be almost no interaction with anyone other than your team. Academic courses relevant to the project: Creating and Leading Entrepreneurial Organisation Name: Bhargavi Komanduri (2015A5PS0858H)	2018- 19- sem1

Company	Experience	Year
National Entrepreneurship Network	My project majorly included research work which aimed to discover the latest trends and tools in the field of digital marketing and content marketing so that I could suggest appropriate ones for the benefit of the organization. In order to be able to make suggestions in the field of digital marketing to the organization, I started acquainting myself with the digital marketing concepts and terminologies, studied the marketing strategies of various organizations in the non-profit sector along with the latest tools and software and how they can help the organization in particular. Through the duration of this project, various trends in the field of content marketing and the latest tools in the field of Digital Marketing were studied and the appropriate ones which could be incorporated into the organization were suggested. The foundation's Instagram page was also revived as a part of the project and suggestions were made to the foundation to enhance their reach through various tools on the platform. An overall improvement in the field and knowledge of digital marketing has been obtained because of this project Tool used (Development tools - H/w, S/w): Google, Wordpress, Buffer Objectives of the project: The objective behind this project is to study in a detailed manner about all the latest trends in the field of Digital Marketing and suggest as to how these latest developments can fit into and benefit the functioning of the marketing strategies currently being used by the National Entrepreneurship Network of Wadhwani Foundation. Major Learning Outcomes: Introduction to the field of Digital Marketing & Content Marketing. Brief Description of working environment, expectations from the company: The work environment in the organization was very friendly. Through our entire stay in this station, the people in my team and in the organization as a whole were very helpful and accommodating. I joined the organization with very minimal knowledge about the field of digital marketing and expected to be more in sync with the fi	2018- 19- sem1
National Entrepreneurship Network	Research work on startup ecosystems of Malaysia, Indonesia and Philippines to get an idea about the region Southeast Asia. Research work on startup ecosystems of Cambodia and Vietnam for the Foundation's expansion. Using Mailchimp and Wufoo Forms for registration of the E-leader workshops, and posting about the events on Facebook. Backend analysis of the weekly reports about the classroom programs that are being run in Indonesia and Philippines. Tool used (Development tools - H/w, S/w): Excel, Powerpoint, Word, MailChimp, Wufoo, Facebook Objectives of the project: The major objective of this project is to conduct research on the entrepreneurial ecosystem and economic parameters of south east Asian countries to ensure fluid and efficient expansion of Wadhwani Foundation and successful implementation of its initiatives. The main aim of the foundation is to promote and develop the start-up culture and instil knowledge as well as provide resources to budding entrepreneurs Student Name: Anagh Gupta	2018- 19- sem1
NCAER	Mostly excel and content writing based work. Searching for data and collection of it was an important part. Tool used (Development tools - H/w, S/w): MS Excel, MS Word Objectives of the project: To make profiles of all states and union territories of the country. Major Learning Outcomes: How to write clear academic reports and present information in a researcher friendly way. Details of Papers/patents: Tourist Satellite Account, District Driven Growth Brief Description of working environment, expectations from the company: The working hours are 9:30 - 5:30. They are fixed and compulsory. 2 leaves are given per month. It is a professional work place but not much focus on a dress code. Nice, friendly seniors who are really helpful in solving problems in need. Academic courses relevant to the project: Market Research, DRM, SAPM Bangalore Student Name: Himangshu Baid	2018- 19- sem1
NetSkope Software India Pvt. Ltd. ,	I was initially tasked with reducing the volume of logging being done by the "Introspection, for SaaS apps" product of the company. It involved optimizing the logs and identifying the unnecessary or obsolete logs and removing them. In the latter half of my PS 2, the task of improving the unit tests that already exist by removing dependencies and improving the coverage. Tool used (Development tools - H/w, S/w): Python, Celery, Kafka, Redis, MongoDB, Docker, Git Objectives of the project: 1. Reduction of volume sent to logs.  2. Improvement of unit testing time. Major Learning Outcomes: Python, Corporate environment Brief Description of working environment, expectations from the company: The company has a very supportive working environment and all that it requires from employees is that they complete the amount of work they have committed to completing in the time required time frame. Faculty Name: MJ Bagewadi	2018- 19- sem1
Next Education India Pvt. Ltd., Hyderabad	Data migration using ETL tools Tools used (Development tools - H/w, S/w): Pentagon, workbench, open source softwares Objectives of the project: Data migration of old data to new tables Outcomes of the project: DONE BEFORE TIME. Major Learning Outcomes: Database management and Core Infrastructure Brief Description of working environment, expectations from the company: Everyone is approachable. Decision taking can be improved. Academic courses relevant to the project: DBMS, Machine learning.	2017- 18- sem1

Company	Experience	Year
Next Education India Pvt. Ltd., Hyderabad	I was in core infrastructure team. One important project was to setup, configure and integrate docker swarm server to run all their web services as docker containers. Another project was to integrate sentry which is an error tracking web server in QA and production environment. Also did a project to create some complex Jobs in Jenkins, a continuous integration server. Other was to integrate a kafka monitoring system. Tools used (Development tools - H/w, S/w): open source software and web servers Objectives of the project: to automate, resolve errors Outcomes of the project: Created easier development environment Major Learning Outcomes: Adequate testing should be done before deploying anything Brief Description of working environment, expectations from the company: Everyone in the company is very approachable. Decision taking can be improved. Academic courses relevant to the project: basic coding.	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	I worked with the database team here. My role was solely to research and implement existing database tools and technologies which may optimize, improve the system, as well as reduce the amount of work required by the DB Admin. Tools used (Development tools - H/w, S/w): MySQL, Tungsten Replicator, HAProxy, ProxySQL, Amazon RDS, Pentaho kettle Objectives of the project: Research and Implementation of database tools to improve system performance. Outcomes of the project: Tools were researched and recommendations were passed to higher management. Major Learning Outcomes: Learnt systems engg. Brief Description of working environment, expectations from the company: Working environment is healthy, and since the company is not very big, the work assigned will not be limited in scope and skills required. The company needs a lot of work, so personal initiative taken is always rewarded with good guidance and learning outcomes. Academic courses relevant to the project: DBMS, DSA, OS.	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	my project for the duration of practice school was data migration from old erp system to new services based erp system. the secondary part of the project was to create data warehouse for reporting and analysis solutions to the new erp system. the techniques used and table used are confidential details of the company. the broad area of migration included databases such as transport, academics, staff, medical, contact and custom Tools used (Development tools - H/w, S/w): PENTAHO KETTLE, REDSHIFT, MySQL Objectives of the project: DATA MIGRATION Outcomes of the project: DATA MIGRATED FROM OLD ERP TO NEW ERP Major Learning Outcomes: PENTAHO KETTLE, DATA WAREHOUSING, DATA MIGRATION Brief Description of working environment, expectations from the company: NEXT EDUCATION IS A COMPANY WHICH HAS GROWN UP FROM A START UP TO MID SCALE COMPANY. THERE ARE A FEW ASPECTS OF A BIG COMPANY AND A STARTUP. EMPLOYEES ARE REQUIRED TO COME 6 DAYS A WEEK AND 9 HOURS A DAY. TEAM WORK IS GIVEN IMPORTANCE AND FLUIDITY IS ESSENTIAL. Academic courses relevant to the project: DATABASE MANAGEMENT SOFTWARE, SQL	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	The work involved product development for the next version of the flagship product of the company. Earlier months consisted of training and learning of tools and technologies relevant to the project. This involved making Proof of Concept apps to demonstrate understanding. After this, active development of the product was undertaken. The final product was an app based on JavaScript web stack. This incorporated technologies like JavaScript, angular, typescript, j query, NodeJS, etc. By the end of PS, I was working on the remote control interface for controlling the navigation of the app in classroom setting. This was my last project. Tools used (Development tools - H/w, S/w): JavaScript, TypeScript, AngularJS, Angular, NodeJS, JQuery, MySQL Objectives of the project: Product Development Outcomes of the project: Working app for testing Major Learning Outcomes: Web based technologies, product development Brief Description of working environment, expectations from the company: The working environment was conducive to software development. Proper seating arrangement and systems were provided. Everyone was approachable. Decision making process should be more fluid and there is room for improvement. Academic courses relevant to the project: Software Engineering.	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	setting up of docker, sentry, grafana Tools used (Development tools - H/w, S/w): docker, eclipse, nodejs, sentry, kafka, grafana, prometheus Objectives of the project: setting up the development environment Outcomes of the project: platform independent running application Major Learning Outcomes: architecture of the working of the technical department Brief Description of working environment, expectations from the company: setting up of docker, sentry, grafana Academic courses relevant to the project: c, oop, os.	2017- 18- sem1

Company	Experience	Year
Next Education India Pvt. Ltd., Hyderabad	Creating a microservice for adding of academic information of staff in a school management system. Debugging errors in already existing services. PDF generation and embedding fonts in PDFs. Learnt about an Agile framework: Scrum, which is a management and control process that cuts through the complexity to focus on building products that meet business needs. Tools used (Development tools - H/w, S/w): Spring Framework, Hibernate, Java, Microservices Architecture, JPA Data Repository, AngularJS. Objectives of the project: Applying the microservices architecture to a web application, Next Learning Platform Outcomes of the project: Addition of microservice to the web application Brief Description of working environment, expectations from the company: Since, the company is expanding rapidly there are issues with there not being enough workstations. The employees of the company are friendly and willing to help out. The company expects professional behavior and work on par with its employees. Academic courses relevant to the project: Object Oriented Programming (CS)	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	Developed web applications (including APIs) by implementing micro-services architecture. Worked on JavaScript, AngularJS, Java, Spring, Hibernate and MySQL. Tools used (Development tools - H/w, S/w): Eclipse, Java, Spring, Hibernate, JavaScript, AngularJS, MySQL Objectives of the project: To develop web applications for the company's newly launched product using Microservice Architecture. Outcomes of the project: The project was the part of the company's newly launched product which target schools and their management system. Major Learning Outcomes: Learned full end-to-end web development. Worked in Java, JavaScript, MySQL, HTML. Learned to use Microservices Architecture for the backend development. Brief Description of working environment, expectations from the company: The projects were good. My mentor and his team were very supportive and helping. But, the Management was very poor. The intern program was unplanned Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	I've worked as an SDE (Software Development Engineer), here at Next Education India Pvt. Ltd. during my 6 months of internship. Primarily, my tasks were to work on Web Application Development using Microservice architecture. In July, we had ~20 days of technical training which was just efficient enough for us to cope up with their expectations. In August, my task was to fix the bugs in a module of one of their products. Later on, I was given major tasks and stories which needed to be handled on my own, alongside support provided by respective assigned mentors. Even in cases of dependencies on other modules, we had to communicate with tech heads on our own which could count as managing skills. Overall, it was a wonderful opportunity to explore the world of web development. Tools used (Development tools - H/w, S/w): HTML, CSS, AngularJS, Spring, SQL, Camunda(Workflow) Objectives of the project: Development of Web applications using Microservice Design Standards Outcomes of the project: Design of Microservices using Business Process Automation and Management Major Learning Outcomes: Web Design and Development Brief Description of working environment, expectations from the company: Due to higher requirement during the months of Practice School, we were given hefty tasks to handle but just enough time to complete them. They expect us to complete the tasks punctually in time and learning new stuff is common in companies which are still growing. Although we had no fixed desk to work on in earlier months, we were allotted places 2 floors below the tech-team floor. Overall, work environment is satisfactory. Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	I was a part of core Product-Development team for Next Education . I was responsible for the development of Application Programming Interface(APIs) as backend development and User Interfaces(UIs). My work was majorly focused on Microservices Architecture development with Application Programming Interface(APIs) development. Throughout the course of PS2, I developed various features for NextLearningPlatform which is a new product for all stakeholders of school administration. Tools used (Development tools - H/w, S/w): Java, Angular JS, HTML, Eclipse(for Microservice Architecture) Objectives of the project: To develop web based application using MicroService Architecture Outcomes of the project: Developed new features using MicroService Architecture Major Learning Outcomes: Programming languages such as Java, Angular JS and HTML. Learned about web development applications. Details of papers/patents: No patents or research paper involved. Brief Description of working environment, expectations from the company: Working environment of the company is not very encouraging. A compulsory 9-hour clock maintenance with no compensation for extra working hours. Employees might learn about new technologies but no place to relieve work stress. Next Education is a technology-driven company serving the education systemin India. Next Education provides innovative products and services which provide solutions for all the stakeholders of K-12 sector. The company has been growing many folds since its inception and is expected to grow in near future. Academic courses relevant to the project: C Programming, Object Oriented Programming.	2017- 18- sem1

Company	Experience	Year
Next Education India Pvt. Ltd., Hyderabad	Worked on the module of NextInventory which is a part of NextLearningPlatform. Tools used (Development tools - H/w, S/w): Programming Language used is Java . Learned & worked using bash shell scripting , AngularJS, Hibernate , Spring , MySQL . Running the Application on TomcatServer and Deployed it in a Docker Container . Objectives of the project: Change the Design of the existing microservice and also create Api's for the new microservice so that the new Api's are backward compatible with the previos ones, and also to improve the Overall performance of the Module . Outcomes of the project: Learned how to create a web application using the microservices architecture and finished the Work Assigned . Major Learning Outcomes: Learned how to create a web application, worked on Angular ,java, hibernate Spring MySQL, Spring . Details of papers/patents: Work Not related to Research , So no papers published . Brief Description of working environment, expectations from the company: Oh God! Terrible Work timings , Not true Professional Work Environment .if you Get a good mentor , you might be able to learn a Lot . Academic courses relevant to the project: OOP, OS.	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	adding feature in the Next learning Platform product(and erp content management software). Worked on the Next student Microservice of this software Tools used (Development tools - H/w, S/w): Java, SQL, Angular Objectives of the project: study Microservices Architecture and building web application Outcomes of the project: Learnt about Microservices Architecture and built web application for the NLP software Major Learning Outcomes: Learnt different technologies like java and javascript Brief Description of working environment, expectations from the company: company was crowded	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	Development of next NLP( WEB application ) using java and angularjs Tools used (Development tools - H/w, S/w): Spring mvc, angularjs, hibernate, mysql Objectives of the project: Development of next NLP( WEB application ) using java and angularjs Outcomes of the project: Developed is 5 pages in the product regarding students fee Major Learning Outcomes: Learned how web applications are developed by a team and different technology Brief Description of working environment, expectations from the company: There was training for 1 and half month . Work was good. Poor management .Nice people bad environment . Academic courses relevant to the project: Java	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	I worked on Web Application Design and Development for an education sector company-Next Education. I developed applications for the most successful product of Next Education - "Teach Next" which is used by more than 10,000 schools all over India. I developed more than 10 Single Page Applications (SPA) for student assessment. Tools used (Development tools - H/w, S/w): HTML, CSS, Javascript (AngularJS) Objectives of the project: To make Web Applications for teachers to make assessment of students easy and fun. Outcomes of the project: Developed 10 applications which are going to be impolemented in the next update of the product in April, 2018. The product will go to mre than 10,000 schools. Major Learning Outcomes: Web Design and Development. Brief Description of working environment, expectations from the company: There is enough freedom given to you, in Next Education. As an intern, not much attention is given to you and no strict monitoring is done on your work, which is a demerit. Academic courses relevant to the project: C Programming	2017- 18- sem1
Next Education India Pvt. Ltd., Hyderabad	Developing a web applications using Microservice Architecture Tools used (Development tools - H/w, S/w): Java, Spring, Hibernate, JavaScript, HTML5, AngularJS Objectives of the project: Devoloping web application by implementing MVC Architecture. Outcomes of the project: Developed web applications by implementing MVC Architecture Major Learning Outcomes: Java, Spring, Hibernate, AngularJS Brief Description of working environment, expectations from the company: Excellent Learning Environment, Friendly People. Academic courses relevant to the project: OOPs, DisCo, DSA	2017- 18- sem1

Company	Experience	Year
Next Education India Pvt. Ltd., Hyderabad	I worked as a part of the Adaptive Learning team at Next Education which uses machine learning models to improve the learning experience of students on their platform. I used information retrieval and natural language processing techniques to develop an automated question answering system that can answer question from any textbook in the database. The task required the application of both statistical and semantic processing models, statistical models being used to retrieve the section of the database that is likely to contain the answers to a query and semantic models to process the relevant section to obtain the answer to the query. The passage retrieval algorithm ranks the correct passage in the top 3 contenders for 82% of the test cases and the question answering model provides the exact matching answer in 73% of the cases and gives an F1 score of 81.52. Tools used (Development tools - H/w, S/w): Tensorflow, Stanford CoreNLP Objectives of the project: To develop an automated question answering system Outcomes of the project: Developed an automated question answering system with acceptable errors which can be deployed as a product for the company. Major Learning Outcomes: Use of Deep Learning models for Natural Language Processing; Knowledge Base Construction from Unstructured Data Brief Description of working environment, expectations from the company: The adaptive learning team is in a nascent stage with less than 10 members. This allowed me the freedom to explore more techniques relevant to my project and come up with innovative solutions. This freedom, however, came at the cost of high expectations from the company as I was required to work on active development of products which required me to have a lot of prerequisite knowledge of the algorithms and techniques being used. The team provides a great environment to deal with such a daunting task. The upper management also supports the team greatly in all its projects creating a good environment for research and development. Academic courses relevant to th	2017 18- sem
Next Education India Pvt. Ltd., Hyderabad	data migration from the old erp database to the new databases. Tools used (Development tools - H/w, S/w): Tensorflow, Stanford CoreNLP Objectives of the project: To develop an automated question answering system Outcomes of the project: Developed an automated question answering system with acceptable errors which can be deployed as a product for the company. Major Learning Outcomes: Use of Deep Learning models for Natural Language Processing; Knowledge Base Construction from Unstructured Data Brief Description of working environment, expectations from the company: The adaptive learning team is in a nascent stage with less than 10 members. This allowed me the freedom to explore more techniques relevant to my project and come up with innovative solutions. This freedom, however, came at the cost of high expectations from the company as I was required to work on active development of products which required me to have a lot of prerequisite knowledge of the algorithms and techniques being used. The team provides a great environment to deal with such a daunting task. The upper management also supports the team greatly in all its projects creating a good environment for research and development. Academic courses relevant to the project: Machine Learning; Neural Networks and Fuzzy Logic.	2017 18- sem
Next Education India Pvt. Ltd., Hyderabad	data migration from the old erp database to the new databases Tools used (Development tools - H/w, S/w): mysql. pentaho kettle Objectives of the project: data migration Outcomes of the project: Data migration from old erp to new erp Major Learning Outcomes: Pentaho kettle, data migration, data warehousing Brief Description of working environment, expectations from the company: good environment, helpful employees.	2017 18- sem
Next Education India Pvt. Ltd., Hyderabad	By End of my PS, I have developed English Lab Report Module and Reports Module in TeachNext Web Application. Out of which, Reports Module is deployed on main server, While English Lab Reports Module is currently under testing and will be deployed in few more months. TeachNext uses Struts Framework which is outdated compared to new frameworks available in the market. Therefore, they have been developing new modules such Next Learning Platform and Learning Management System which are based on newer technologies. Tools used (Development tools - H/w, S/w): Development of new modules in already existing web application Objectives of the project: Development of new modules in already existing web application Outcomes of the project: Developed two new modules using struts framework Major Learning Outcomes: Web application development Brief Description of working environment, expectations from the company: Company expects us to work for 9 hrs per day, 6 days a week. Any leave more than 2 days is loss of pay. Similarly, if less than 9 hrs per day will be counted as half day with loss of pay. Working environment is not good compared to other companies, because there is lot of intake compared to space available. Academic courses relevant to the project: Java Student	2017 18- sem

Company	Experience	Year
Next Gen PMS(Goodera)- IT	You people would be required to make dashboards, based on React JS, Node JS, Html, Css, Javascript and mongo db. No Pre req is required to work here, but the work here is extremely hectic, there are actually no office timings, whenever there is work you will have to do it, irrespective of whether you want to work or not. PPO chances are pretty decent, only if you go beyond your boundaries to work. The CTC is around 12 lakhs Don't just choose this PS because of high stipend, come here if you want to learn Web Development from stratch, but be prepared to work very hard Tool used (Development tools - H/w, S/w): React Js, Node JS,HTML, CSS, Javascipt, Bootstrap, Mongo DB Objectives of the project: Making Digital Dashboards Major Learning Outcomes: Leaning Web Development	2018- 19- sem1
NextGen PMS Pvt. Ltd - Non IT, Bangalore	Developing responsive dashboards for client specific requirements. Tools used (Development tools - H/w, S/w): HTML, CSS, JavaScript Objectives of the project: To make websites. Outcomes of the project: Learning about the front end web development process Major Learning Outcomes: Good enterprise coding experience. Experience is building websites from scratch. Brief Description of working environment, expectations from the company: The company could be a bit more flexible about the timings and let interns have the choice to diversify.	2017- 18- sem1
NextGen PMS Pvt. Ltd - Non IT, Bangalore	Created Digital Dashboards for various high profile clients (including Castrol, GAP, Capgemini, etc.) using HTML, CSS and Javascript. Did major font-end work and a little back-end work using python. Tools used (Development tools - H/w, S/w): HTML, CSS, Javascript and Python Objectives of the project: Create optimal Digital Dashboards Outcomes of the project: Created multiple dashboards for multiple clients that load with minimal time. Major Learning Outcomes: Learnt Javascript Brief Description of working environment, expectations from the company: The work environment is very friendly and relaxed. Everyone calls each other by their names and there is not much of a hierarchy. Expected to be doing more challenging work than what was provided. Academic courses relevant to the project: CP, DSA, DBS	2017- 18- sem1
NextGen PMS Pvt. Ltd - Non IT, Bangalore	Built websites in PS. Tools used (Development tools - H/w, S/w): javascript, html and css Objectives of the project: Building Digital Dashboard Outcomes of the project: Building Digital Dashboard Major Learning Outcomes: Learnt Javascript in depth Brief Description of working environment, expectations from the company: very hectic environment Faculty Comments: Expectations from industry: Nucleus Software, Noida: Mostly interested in taking students of EEE and related streams, with software skills. Students should prepare themselves for Java programming and related technologies. Good chances of PPO on clearing of a written examination. Company is highly interested in absorbing Bitsians. Student	2017- 18- sem1
NextGen PMS Pvt. Ltd, Bangalore	Building digital dashboards, writing scripts to make API calls Tools used (Development tools - H/w, S/w):HTML, CSS, JavaScript, JQuery, Bootstrap, Python, Leaflet.js, C3.js, Moment.js, DataTables Objectives of the project: We were not given specific projects, focused purely on the day-to-day work for the company. Major Learning Outcomes: Proficiency with HTML, JavaScript, JQuery library, Bootstrap framework, other JavaScript and JQuery libraries. Familiarity with the working of APIs, and making API calls. Brief Description of working environment, expectations from the company: Workplace is quite relaxed; the existing employees were very welcoming and helpful. The in time at the office is quite lax, provided you are willing to stay late to make up for any work you have on the day. The office is quite bare in terms of resources, with only a small refrigerator, coffee machine, and water dispenser. The work that we were assigned is not the most glorious or engaging task, but you can see the impact it has for the company and its clients.	2016- 17- sem1
NextGen PMS Pvt. Ltd, Bangalore	Simple web development. The task of interns is to make dashboards for the company and the timeline given to make them is very small and hence the work is very hectic. The work gets repetitive after a month and nothing much is there to learn. Tools used (Development tools - H/w, S/w): HTML, CSS, JavaScript Objectives of the project: To make dashboards Outcomes of the project: Dashboards Brief Description of working environment, expectations from the company: If you are from non-CS background, then expect a very low PPO package and the profile offered will have testing and dashboarding work mostly.	2016- 17- sem1
NextGen PMS Pvt. Ltd, Bangalore	Making Dashboards Tools used (Development tools - H/w, S/w):HTML, CSS, JavaScript Objectives of the project: Making Dashboards Outcomes of the project: Learning basic web technologies Major Learning Outcomes: Building web pages Brief Description of working environment, expectations from the company: The project description in the PS website was no way related to the work which was assigned to us, and the work was repetitive.	2016- 17- sem1

Company	Experience	Year
NextGen PMS Pvt. Ltd, Bangalore	I wanted to leverage the PS 2 opportunity to gather experience in the field of consulting and NextGen, a pioneering startup in the CSR & Sustainability space. The projects I undertook gave me a lot of exposure in end-to-end program management and product standardization. During this internship tenure, I worked on a total of four projects out of which two were end-to-end CSR management. In these two projects, I was involved right from project conceptualization to NGO selection and product configuration. It helped me get a brief exposure to client-facing roles. Next, I worked on a social audit which required field visits in Bangalore and Chennai. This helped me quickly pick up skills of multi-level stakeholder management, data collection and analysis, and reporting of findings. All this while, I was working in a small team with strict deadlines and interacting with the top leadership of the client team. Next, I worked on product standardization and configuration. It helped me learn product design thinking and apply it to the problem at hand. It also involved a lot of testing and troubleshooting work. This PS2 experience has been an important milestone in shaping my skills as well as approach to the work culture at a startup. Tools used (Development tools - H/w, S/w):Soft Skills Objectives of the project: End-to-end CSR Management, Social Audit, Dashboard Standardization & Product Configuration Outcomes of the project: Dashboard standardization helped in developing executive dashboards with standard style, approach, features and color scheme. The product configuration was done in a way which included all project life-cycle stages before monitoring and evaluation. The social audit highlighted under-utilization of funds by NGOs and helped improve partner evaluation and selection process along with constant monitoring of the ongoing projects. Major Learning Outcomes: Multi-level stakeholder management, data collation, analysis and reporting. Product design, testing and troubleshooting. Brief Description of working en	2016- 17- sem1
NextGen PMS Pvt. Ltd, Bangalore	We created dashboards using different web technologies. Tools used (Development tools - H/w, S/w):Javascript,html,css Objectives of the project: To create dashboards according to different client requirements Outcomes of the project: Proper monitoring and evaluation of different csr projects. Major Learning Outcomes: Web technologies Brief Description of working environment, expectations from the company: Amazing people and good work environment.	2016- 17- sem1
NextGen PMS Pvt. Ltd, Bangalore	Making Dashboards Tools used (Development tools - H/w, S/w):Html, CSS, JAVA Script Objectives of the project: Making Dashboards Outcomes of the project: Learning basic web technologies Major Learning Outcomes: Building web pages Brief Description of working environment, expectations from the company: The project description in the PS website was no way related the work which was assigned to us, and the work was repetitive.	2016- 17- sem1

Experience Year Company I wanted to leverage the PS 2 opportunity to gather experience in the field of consulting and NextGen, a pioneering startup in the CSR & Sustainability space. The projects I undertook gave me a lot of exposure in end-to-end program management and product standardization. During this internship tenure, I worked on a total of four projects out of which two were end-to-end CSR management. In these two projects, I was involved right from project conceptualization to NGO selection and product configuration. It helped me get a brief exposure to client-facing roles. Next, I worked on a social audit which required field visits in Bangalore and Chennai. This helped me quickly pick up skills of multi-level stakeholder management, data collection and analysis, and reporting of findings. All this while, I was working in a small team with strict deadlines and interacting with the top leadership of the client team. Next, I worked on product standardization and configuration. It helped me learn product design thinking and apply it to the problem at hand. It also involved a lot of testing and troubleshooting work. This PS2 experience has been an 2016important milestone in shaping my skills as well as approach to the work culture at a startup. Tools used NextGen PMS Pvt. Ltd, (Development tools - H/w, S/w):Soft Skills Objectives of the project: End-to-end CSR Management, Social 17-Bangalore Audit, Dashboard Standardization & Product Configuration Outcomes of the project: Dashboard sem1 standardization helped in developing executive dashboards with standard style, approach, features and color scheme. The product configuration was done in a way which included all project life-cycle stages before monitoring and evaluation. The social audit highlighted under-utilization of funds by NGOs and helped improve partner evaluation and selection process along with constant monitoring of the ongoing projects. Major Learning Outcomes: Multi-level stakeholder management, data collation, analysis and reporting. Product design, testing and troubleshooting. Brief Description of working environment, expectations from the company: The company is transitioning from a start-up to corporate and hence a mixed style of working is witnessed. A lot of work is expected from your end without much guidance which leads to reiterations and changes in the work already done. There is no work culture to look forward to. In case, one should not join the station in hope to learn about development sector, since that kind of exposure is minimal. We created dashboards using different web technologies. Tools used (Development tools - H/w, S/w): JAVAscript, html, css Objectives of the project: To create dashboards according to different client 2016-NextGen PMS Pvt. Ltd, requirements Outcomes of the project: Proper monitoring and evaluation of different csr projects. Major 17-Bangalore Learning Outcomes: Web technologies Brief Description of working environment, expectations from the sem1 company: Amazing people and good work environment. The project focuses on key aspects in Corporate Social Responsibility and Sustainability. There are 3 projects that I have worked on, 2 in CSR and 1 in Sustainability. Sustainability project for a major Apparel Manufacturer in Sri Lanka required various indicators as per the Global Reporting Initiative (GRI)'s quidelines to have been followed while mapping the necessary indicators for tracking Environmental, Social and Economic impact. Under the CSR banner, Social Audit and Needs Assessment for MNCs in the financial sector have been completed. Upon performing the necessary Impact Assessment & Needs Assessment for the Stakeholders, and on analyzing various financial documents provided, extensive reports have been furnished. Deployment of projects on NextGen's p3 platform for creating dashboards necessary for client's usage is a major part of all projects taken up by the firm. Tools used (Development 2016-NextGen PMS Pvt. Ltd, tools - H/w, S/w):MS Excel Objectives of the project: To gain knowledge and insight about end-to-end CSR 17-Bangalore Management Outcomes of the project: The project has made CSR project management for major clients sem1 highly efficient and thorough. These clients contribute towards major revenue for the firm. Major Learning Outcomes: Various parameters and indicators involved in Sustainability reporting, Indepth knowledge of various stages in End-to-End CSR Project Management, Efficient Data collection, collation and analysis using Excel tools, Concepts of product design and data visualization, Nuances of formal reporting techniques. Brief Description of working environment, expectations from the company: Most of the coworkers are aged 30 years or lesser. The work culture is that of a start up. Work timings are usually from 9:30 AM - 7 PM, however a lot of days require people to stay overtime. Some people stay overnight to work too. The consulting team is slightly short staffed, so there is generally a lot of work load on each individual. However, the work is interesting and the learning curve is steep.

Year

Experience

Company

I joined the consulting team of Nextgen as a Business analyst intern as a part of my PS-II. My work involved supporting the senior analysts and consultants to fulfill client requirements. Most of the work was related to configuring the technology platform of Nextgen, called p3 for the clients. There was a considerable amount of data collection, cleaning and determination of KPIs that I did. I got to work with multiple teams and face clients as well. over all it was a mixed bag experience with the positive highlight being the great exposure and the negative highlight being long work hours and sometimes mechanical monotonous work. Tools used (Development tools - H/w, S/w): Excel and In-House technical platform "p3" Objectives of the project: According to Section 135, companies having a net worth of Rs 500 Cr and more need to spend 2% of their average three year's profits on CSR projects which are validated by the Government. With the advent of this CSR mandate, the corporates have project requirements like identification of an implementation partner, monitoring and evaluation, and impact assessment of CSR initiatives in sectors ranging from livelihood and education to sanitation. My project involved working with such clients to develop a strategy of their programs and get in place analytics tools to gain insights of their CSR interventions. It also involved configuring the p3 platform developed by Nextgen for the clients and adding data to it. Outcomes of the project: Successfully contributed to multiple projects. Assisted various teams on p3 configuration. Helped in internal development and standardizing processes. Major Learning Outcomes: I have worked and interacted with multiple teams and clients. Owing to this experience, my thoughts about the development sector have evolved and this firmness to the thought process reflects in discussions that I engage in. I am now able to better relate to the issues that are always talked about like poverty and illiteracy. At the end of the internship, I can say I clearly know the CSR scenario in India and 2016-NextGen PMS Pvt. Ltd, have a thorough understanding of the product p3 being developed and used here. Brief Description of 17-Bangalore working environment, expectations from the company: It's a fast paced, high growth startup with a very sem1 young team. Working environment is not very formal and there is no strict dress code (apart from client meetings). There is very little structure in the company currently and you get a chance to interact with a lot of people. I was expecting more of a consulting based role here (research, framework development, designing implementation plan etc.), but the work here is closer to project management. They will give you work and you will be given a responsibility to complete it within a given span of time. You will usually work for 8-9 hours a day and might have to stay back on a few days' after 7 pm as well (long work hours). The exposure I got was great. I met clients and traveled for few small assignments. Overall it was a mixed bag experience. Mentor Designation: Associate Vice President, GPM ,NSEL The company develops products for banking and financial domain using Java and related technologies. The students undergo rigorous training for around a month and are prepared for the same. The students are put in live product modules. Most of the features developed by BITS students have already become a part of the final product. BITS interns are intelligent and hardworking. Nucleus prefers to continue with BITS on this program. Designation: Manager -Product Engineering Faculty Nucleus Software is into developing banking and financial software. It is essentially a product and service based company. With already an established base of products like FinnAxia and FinnOne, it is moving ahead in other domains as well. BITS students essentially from EEE and other related disciplines have a good opportunity to do their internship here. The students undergo rigorous training for more than a month on JAVA and related technologies that would be required for the projects ahead. The students get opportunity to work on modules that become a part of the final product and most of which are shipped to the customer even before the students complete their internship. Nucleus Software is a good place to work with an extremely good work-life balance. Student Research about food processing sector in India . Different types of issues in the sector and various interventions required. Also different initiatives taken by government. Tool used (Development tools -H/w, S/w): Statistical tools Objectives of the project: Research about food processing sector in India. 2018-NISTADS, Delhi Major Learning Outcomes: Learned about food processing sector in detail. Academic courses relevant to 19the project: Techniques in social research Tool used (Development tools - H/w, S/w): Excel Objectives of sem1 the project: P&L production Major Learning Outcomes: How to handle Profit and Loss Statements Name: Devansh Chaudhary Designing an automated, visible and systematic system using Microsoft 365 Tools like Power BI, Power Automate and Power Apps for promotion packs in NIVEA. Tool used (Development tools - H/w, S/w): Microsoft 365 Tools Objectives of the project: Designing an automated, visible and systematic system 2019using Microsoft 365 Tools like Power BI, Power Automate and Power Apps for promotion packs. Major NIVEA, Mumbai 20-Learning Outcomes: Learnt Power BI, Power Apps, Power Automate. Details of Papers/patents: Brief sem1 Description of working environment, expectations from the company: Great work environment. I was the only intern and my manager was a good person. Academic courses relevant to the project: Supply Chain Management Student

Company	Experience	Year
Nomura - FinTech , Mumbai	The Fintech department aims to bridge the gap between finance and technology. It recognises the technological pain points of the various financial divisions in the firm and connects them with internal IT/external vendors for solutions. The interns were allotted a project on Augmented Reality. Since it was a relatively unexplored theme in finance, a lot of effort had to go in for learning the tech from the start as well as in product development. As part of 'business as usual', the interns collaborated with various divisions for adopting and proliferating digital tools. Extensive market research was done on new business models the firm was looking for potential adoption. Various decks for presentation for the senior management were prepared. Tool used (Development tools - H/w, S/w): Excel, PowerPoint, Unity 3D Objectives of the project: To get a hands on experience on a modern technology and it's relevance to the firm's business Major Learning Outcomes: Being up to date with both financial markets and modern tech Details of Papers/patents: Brief Description of working environment, expectations from the company: The company does not differentiate between a full time employee and an intern. The opinion of interns are always sought and valued during meetings and calls. The working hours are flexible. The managers and other employees are always willing to help. The expected deliverables are time bound but reasonable. Academic courses relevant to the project: FOFA, Business Analysis and Valuation, Financial Management, Security Analysis and Portfolio Management	2019- 20- sem1
Nomura - FinTech , Mumbai	Work involved liasing with various divisions within the company to map out their technological needs and finding the relevant tools required to match the needs. Also performed market research for some projects and made an app for the annual technological fair of the company. Tool used (Development tools - H/w, S/w): PowerPoint, Excel, R Objectives of the project: Collating the technological needs of the firm Major Learning Outcomes: Exposure to various divisions within Nomura, interaction with clients and understanding workflow and decision making systems of large banks. Details of Papers/patents: Brief Description of working environment, expectations from the company: Very open environment, seniors are approachable. Academic courses relevant to the project: Bit of Financial Management was required for one of the project. Student	2019- 20- sem1
Nomura Global Finance	I was involved in multiple projects and ad hoc tasks. With a view to broaden my knowledge and maintain the dynamic nature of my internship I wasn't allotted a lot of daily business activities which then led to a lot of time for exploration. One major project was a productivity analysis dashboard on Power BI that gave desks an insight into their business. Another one was a portal which allowed effective communication between traders and concerned administrative authorities. My initial project involved the initiation of a documentation process in order to ensure that all the activities are being documented for any emergencies/requirements in the future. Tool used (Development tools - H/w, S/w): Sharepoint, Power BI, Excel, Powerpoint Objectives of the project: There were multiple projects with objectives like gauging productivity to implementing workflows that improve communication. Major Learning Outcomes: Knowledge of new tools. Handling pressure situations and working with strict deadlines. Brief Description of working environment, expectations from the company: The work environment in my particular team, Business Management was fast paced and required a lot of dedication. Deadlines were strict and often work hours were long. Projects were allotted with high expectations. At the same time, the team was supportive and stuck together. The company is a good firm to work with in order to gain an understanding of markets and form deeper insights into the world of finance. Academic courses relevant to the project: Fundamentals of Finance & Accounting, Derivatives & Risk Management, Securities Analysis & Portfolio Management Name: Pratik Bansal	2018- 19- sem1
Nomura Global Finance	The job profile was of an analyst revolving around building Macros and Automated Dashboards in Excel and Power BI. Also supported the completely automated Single Reporting Platform used by the firm for publishing and managing reports with the help of queries in SQL and templates in Microsoft Business Objects. Tool used (Development tools - H/w, S/w): S/w: Excel,VBA,Power BI,SQL,Python and Microsoft Business Objects Objectives of the project: The project assigned to was to frame an Escalation system for governance and Signoff of Reports produced by the firm. Successfully implemented the system in Report Manager database by writing Python codes and generating stats on an adhoc basis regularly. Major Learning Outcomes: Major learning was in terms of different tools that i got to learn by working on small term projects assigned to me. Work in general is not engaging as it involves daily BAU activities which can be done by anyone in the firm. Details of Papers/patents: For Internal Distribution Only, hence strictly confidential. Brief Description of working environment, expectations from the company: People are friendly and nice. Work environment is professional though a lot of internal politics is involved. Just for the payscale, the job is decent as it offers one of the highest packages for Analyst Profile but roles alloted to interns are not that enagaging and are often given the leftover manual work in the team. Academic courses relevant to the project: FRAM Name: Shruti Narain (20140650)	2018- 19- sem1

Company	Experience	Year
Nomura Global Finance	Work involved pricing Equity linked Structured Products that cater to clients' risk appetite and payoff they seek. Handle daily pricing requests and support the Sales and trading desks in the Asia excluding Japan region. Handle legal work like termsheet preparations needed for trade execution. Tool used (Development tools - H/w, S/w): Proprietary Software, Excel, VBA Objectives of the project: Pricing and analyzing risk associated with Structured Products Major Learning Outcomes: A.Clear understanding of the markets and how they affect the type of products offered. B.Get an idea of making pitch-books for clients C.Understand the charges levied on account of the risk borne by the company when offering the products and impact on PV Brief Description of working environment, expectations from the company: A friendly work culture that accommodates for a holistic learning experience Academic courses relevant to the project: DRM, SAPM, Financial Engineering Name: Palak Oswal (2015A1PS0657H) Tool used (Development tools - H/w, S/w): Power BI, Python Objectives of the project: Automation, reporting, structuring, and daily business operations Major Learning Outcomes: An in depth understanding of practical aspects of how IB back offices work. Introduction into softwares like Tableau, Power BI etc. Brief Description of working environment, expectations from the company: The working environment is very formal and business oriented, and people tend to have high expectations from bitsians. The work is more of an IT nature than finance, yet they require you to have a good understanding of both the sectors. A good grasp on VBA, Python etc will help in adjusting to the company needs quickly. An idea of more advanced topics like ML and AI will be a great plus. Academic courses relevant to the project: Some courses would be FRAM, FoFa, SALAM, DRM	2018 19- sem1
Nomura Global Finance , Mumbai	I worked with the product control department supporting Investment Banking Division of Japan region. My job was to maintain their databases which reflects the IB work. We handled all the P/L statements and associated movements. I was also involved in the restructuring work and automation projects. I built certain reconciliation files for them. Tool used (Development tools - H/w, S/w): MS office (Excel, PowerPoint, Word, Outlook, SharePoint), Webex Objectives of the project: Daily production of profit and loss reports Major Learning Outcomes: Multitasking, Time management to deliver outcome, Accounting practices, Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The work environment was very professional and the company expects you to take responsibility towards your job. You need to take initiative and be at your professional best. Academic courses relevant to the project: FRAM, DRM, FOFA	2019 20- sem1
Nomura Global Finance , Mumbai	For the most part of the internship work mostly consisted of doing Deal Reviews of various trades which was the regular BAU (business as usual) and for the later part of the internship was working on the Amendment Analysis using Power-Bi as well. Tool used (Development tools - H/w, S/w): Sharepoint, Power BI, Excel, Alteryx Objectives of the project: Daily business as usual and Amendment Analysis using Power-Bi Major Learning Outcomes: Handling pressure situations and working with strict deadlines. An in depth understanding of practical aspects of how IB's middle offices work. Introduction into softwares like Alteryx, Power BI etc Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is professional at the same time people are friendly and nice. The team was supportive and stuck together. Team do have some expectations from you. Academic courses relevant to the project: Derivatives & Risk Management Student	2019 20- sem1
Nomura Global Markets , Mumbai	I worked under Nomura Global Markets division with ABS team. Under ABS, there are 2 teams. One works on loan financing and other works in strategy making for secondary debt capital market. My work was related with analysis of loan financed by Nomura. Here, analysis includes periodic assessment of payments made by clients and checking the parameters like delinquency, roll rate, charge off, interest payments, principal payments, prepayments etc. I also worked with issuance of loans to new clients where I had a chance to work with a model which checks the eligibility criteria. I was also assigned some weekly reports where I had to go through various research reports and prepared a summary for risk teams. Tool used (Development tools - H/w, S/w): SQL, Microsoft Excel Objectives of the project: Loan financing Major Learning Outcomes: Understood the structure of loan financed by banks Details of Papers/patents: Brief Description of working environment, expectations from the company: Working Environment is friendly and helpful. No one will treat you like an intern and you hold the sole responsibility of your work. Academic courses relevant to the project: Financial Management	2019 20- sem1

Company	Experience	Year
Nomura Global Markets , Mumbai	I was part of the CVA Trading desk (under Business Resource Management team) for Asia ex-Japan which also manages FVA for certain regions. Small team - 5 including me, out of which the 2 senior-most work from Singapore. Must be at the desk by 7.30 am IST. Similar to other GM profiles, I was assisting in the daily BAU and wasn't given a dedicated project for the duration of 5 months. My daily work included but was not limited to: Running/reporting risk numbers for the desk, corroboration and attribution of daily PnL with MO/Finance along with providing commentary, scenario analysis, monitoring intraday market movements (FIDs only) and hedging positions internally, pricing CVA/DVA/FVA charges for new trades with Asian counterparties. The team also works on a few strategies and takes up ad-hoc projects- this is the more interesting part and you can actively involve yourself once you complete the earlier mentioned tasks. Tool used (Development tools - H/w, S/w): Excel, internal Nomura tools for pricing Objectives of the project: Involved in daily BAU Major Learning Outcomes: Understanding the major risks associated with products in credit/rates/fx. Being a part of the BRM team gives access to a lot of information which helps get a picture of the overall business of the firm in the AeJ region. Details of Papers/patents: Brief Description of working environment, expectations from the company: Treated like any other permanent employee and with that comes an expectation to deliver quickly as well as accurately. Also, a lot of responsibility as decisions will be made on the information you provide. Stressful at times, but worth it. Academic courses relevant to the project: DRM, FRM Student	2019- 20- sem1
Nomura Global Risk , Mumbai	Learnt about risk calculation methodologies, regulations and importance; understood various financial products and their data sourcing & management; BAU: generating reports, data cleansing, data provision; automation of tools used for reporting, risk calculation, data cleansing and data provision Tool used (Development tools - H/w, S/w): VBA, SQL, Python, MS Excel, Oracle DB, Power BI Objectives of the project: Automation and improvement of team reports, migration from one data source to another Major Learning Outcomes: SQL, Power BI Desktop, VBA, basic coding, organisational structure and work flow of Finance back office, regulatory knowledge of investment firms Details of Papers/patents: N A Brief Description of working environment, expectations from the company: The working hours are not very strict unless you stick to the your declared schedule, in place system for all work related necessities, friendly and young teams, helpful nature in regards with learners, open to new projects worthy for team Academic courses relevant to the project: Financial Engineering, Derivatives and Risk Management	2019- 20- sem1
Nomura Global Risk , Mumbai	My work in Nomura was about the Risk management methodology. Our team here develops new risk hedging/mitigation techniques to curb the risk that the company poses while doing business. Tool used (Development tools - H/w, S/w): Python, VBA and R Objectives of the project: Development of python tool to price an option Major Learning Outcomes: I got to learn a lot about finance sector. Got hands on experience of various financial products, technology used here. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is very cool and my manger was very kind. He always helped me in understanding and getting adjusted with team. My other team members were also very helpful and never hesitated in helping me when asked. Academic courses relevant to the project: Derivatives and Risk management Student	2019- 20- sem1
Novartis Healthcare pvt ltd	we were given a project which was related to modeling out different investment scenarios for an end stage drug which defines different strategies for company on how to proceed forward. It also involved finding out an analogue product to predict sales and volume trend for the same drug in coming years based on the analogue. Tool used (Development tools - H/w, S/w): MS Excel, Alteryx Objectives of the project: Cost cutting in org, modeling different investment scenarios Major Learning Outcomes: Pharmaceutical sector knowledge, MS excel, Different marketing strategies Brief Description of working environment, expectations from the company: Working environment is pretty lenient and let you learn on your pace. team is also very friendly but you might find a issue in fitting in as Brand insight team is made up of people who have been in industry for more than 4-5 years.	2018- 19- sem1
Novartis Healthcare Pvt. Ltd. , Hyderabad	I automated the whole market information summary report by drawing a flow sheet in alteryx software. Other than this I mapped wholesalers data with the raw data and then generated multiple presentations by Linking it to alteryx and thus sending daily reports. Tool used (Development tools - H/w, S/w): Alteryx advanced excel Objectives of the project: To automate the market information summary report for Korea region Major Learning Outcomes: Generated revenue of about 3000 dollars and reduce the time drastically Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Work life was in balance and is one of the best companies where you can work at your own pace. Academic courses relevant to the project: No	2019- 20- sem1

Company	Experience	Year
Novartis Healthcare Pvt. Ltd. , Hyderabad	My work mostly included the analysis of data using excel, python and R Tool used (Development tools - H/w, S/w): Excel, Python, R, SQL Objectives of the project: Business Insights Major Learning Outcomes: Analysis, Time Management and Team Work Details of Papers/patents: Brief Description of working environment, expectations from the company: An excellent work environment. All the employees are friendly and always ready to help. Academic courses relevant to the project: Probability and Statistics, Machine Learning Student	2019 <sup>.</sup> 20- sem1
Nreach Online Services Pvt. Ltd. , Bangalore Nucleus Software	I individually called and contacted close to 120 brands for alliances and partnerships with the companies. I converted 10 of them that increased the revenue of the company. I also worked on affiliate marketing and brought in close to 400 functional links from various brands that resulted in an increased inflow of money for the company. It is very good for the company as there are no manual efforts included in these links once they are made live. Approximately 80 of them have already been made live and the rest are in the process of agreement and approval. I also worked in the Marketing and Product teams, in which I increased the Domain authority of the company from 38 to 44. The Domain authority increases on a logarithmic rate and hence, the increase is massive. This was achieved through on-page and off-page SEO (Search Engine Optimization). Tool used (Development tools - H/w, S/w): SEM RUSH, SALES QL, VBA Objectives of the project: To increase the brands in the company and automate processes Major Learning Outcomes: Learned SEM Rush, Excel VBA and analytics. Also gained professional skills such as company calling and negotiations Details of Papers/patents: None Brief Description of working environment, expectations from the company: The organization is a startup which as about 200 employees. They have offices spread across three buildings in HSR Layout in Bangalore. The workplace is small but comfortable. You get to work with various departments and people from different concentrations. The work is mainly related to automation, alliances, marketing, and sales. Location is good as there are a lot of food joints nearby and other PS Stations as well. There are a lot of PG and houses for rent nearby and so it is easy to get a house near the company offices. Academic courses relevant to the project: Effective Public Speaking Student I added new features on mobile wallet app PaySe Tool used (Development tools - H/w, S/w): Android Objectives of the project: To add new features in an existing android application Major	2019- 20- sem1
Nucleus Software	: Android Development Name : Saurav Raj (2015B2A80905G)	sem1
Nucleus Software	So I used a web application to show the proof of concept of the notion that we can detect fraud using mouse clicks made by user on a webpage. Tool used (Development tools - H/w, S/w): H/w: 16GB PC S/w: Eclipse, Spyder Objectives of the project: Fraud detection using mouse clicks made by user on a Web page Major Learning Outcomes: Learnt about how to use JAVA and Python languages. How to build a webpage. Then, I came to know about different types of neural networks that can be used, specifically the LSTM networks. Brief Description of working environment, expectations from the company: Working environment was awesome. Everyone in my team was really helpful and always ready to help. Academic courses relevant to the project: Machine Learning. Neural Networks and Fuzzy Logic Name: Harshit Garg (2014A3PS0257G)	2018- 19- sem1
Nucleus Software	I worked with the Lending Analytics Department of Nucleus Software, where I built a neural network model to forecast time series collection data for next months. Throughout my internship I worked in Java, used DL4J library to add functionalities to my model. From a large sequential dataset, a part of it is passed to train the model and other to test it. Assuming 22 working days in a month, when we pass 22 examples in the model then it will predict dataset for 23rd day. The project is divided into four parts:1. Building a model with appropriate hidden layers and activation functions. 2. Creating a Data Set Iterator file in java to process the input data. 3. Creating a plot utility function to plot the graph between actual and predicted value. 4. Creating the Prediction file which will run with above files. Tool used (Development tools - H/w, S/w): Java, DL4J library, LSTM & RNN models, Apache Maven, Tomcat Objectives of the project: To build a neural model for time series forecasting of collection data Major Learning Outcomes: Learnt useful deep learning applications in the corporate world. Built a neural model to forecast the time series data of collection department for next months. Had deep insight to build neural networks for artificial intelligence to achieve automation. Brief Description of working environment, expectations from the company:  Working hours are flexible in Nucleus Software. We were supposed to work for 9 hours a day. My supervisors were very helpful. I learnt a lot from my team members. Every week review meetings were held with senior mentors to assess our progress. Academic courses relevant to the project: BITS F312, Neural Networks and Fuzzy Logic Name: ALWALA CHANDAN (2015AAPS0234H)	2018- 19- sem1

Company	Experience	Year
Nucleus Software	Upgraded company's lending framework which is built on Spring MVC. Provided a new solution for storage of access logs of application. Tool used (Development tools - H/w, S/w): Spring Framework, Hibernate, Oracle SQL Objectives of the project: Reactive programming support for the product Major Learning Outcomes: Able to code in Spring, working with Oracle SQL Brief Description of working environment, expectations from the company: Very good work culture but work should be finished within deadline. Academic courses relevant to the project: DBMS, OOP Name: Kamanuru Mohith (2015AAPS0261H)	2018- 19- sem1
Nucleus Software	I have made a tool to auto detect and auto correct the issues in the code thereby improving the quality and performance of the code. Tool used (Development tools - H/w, S/w): Java Objectives of the project: To auto detect and correct the issues in the source code thereby improving the quality and performance of the code. Major Learning Outcomes: Java, Debugging, Eclipse plugin, Eclipse platform usage, Linux commands Academic courses relevant to the project: OOPS-Java Name: Saurav Raj (2014B2A80905G)	2018- 19- sem1
Nucleus Software	My project was basically to detect fraud using mouse clicks made by user on a web page. For that initially I made a web page and linked that to JAVA which was further linked to Python where a model was trained to predict whether the click was by a genuine user or not. After testing it on a single web page, I also tested it on a dummy web application. Tool used (Development tools - H/w, S/w): Eclipse, Spring boot framework, Maven, Spyder, REST API Objectives of the project: Detect fraud using mouse clicks made by user on a web page. Major Learning Outcomes: I learnt how to make web pages and applications, how to apply machine learning and deep learning. Brief Description of working environment, expectations from the company: Working environment was good. Mentors and co-mentors were really helpful and guided along the right path. Nucleus Software really provides a good training for beginners. Academic courses relevant to the project: Machine Learning, Neural Networks and Fuzzy logic. Name: Aditya Malhotra (2015A8PS0460G)	2018- 19- sem1
Nucleus Software	Worked on UI Designing, Machine Learning, Full Stack Web Development Tool used (Development tools - H/w, S/w): Neural Networks Objectives of the project: Implement Face Recognition and Sentiment Analysis Major Learning Outcomes: Presenting your work and of course the technologies Academic courses relevant to the project: Any course on Artificial Intelligence. Name: Deepesh Sharma (2015A3PS0218P)	2018- 19- sem1
Nucleus Software	I worked upon developing a realtime log analysis tool using Elastic Stack. The company is completely product-based, and thus the logs generated for each of it's products become crucial for the development and production teams. I worked on processing the raw logs produced for each product and converting that to Structured Data format, so that it can be aggregated to draw real-time analysis. The Analytics Engine Elasticsearch was used as the Back end search engine for the project. Further I brought in a real-time alerting system to the Analysis Dashboards. Tool used (Development tools - H/w, S/w): Elastic Stack 6.0, Red Hat Linux System, Java 8 Objectives of the project: Development of a Robust Real-Time Log Analysis and Diagnostic Tool for product-based logs of the Organization. Major Learning Outcomes: Developed Advanced Java Skills. Learnt the basics of working on a RedHat Linux System. Learnt Intermediate-level Bash Scrpting. Worked as a Elastic Stack Developer, and learnt about Big Data Handling and processing. Brief Description of working environment, expectations from the company: The Work Culture of the Company is excellent in terms of the kind of assistance we get from the teammates and other colleagues. The company is adapting to the prevalent technology stack in the market, and that provides you an ample opportunity to develop your skills from scratch. The biggest advantage is that you directly get to work in the R&D division of a company that is completely product-based. Academic courses relevant to the project: OOP, OS, DBMS, DSA, CP	2018- 19- sem1
Nucleus Software Export Ltd , Noida	Development of Enterprise Content Management Tools used (Development tools - H/w, S/w): languages used-JAVA, JAVAscript frameworksspring, hibernate Objectives of the project: - main objective of the project is to develop a common entity for all the products which can manage their documents Outcomes of the project: version 1 of the product was almost ready for deployment Major Learning Outcomes: bootstrap, JAVA, SQL, mvc Brief Description of working environment, expectations from the company: Nucleus provides lot of opportunities for learning and has a encouraging work environment	2016- 17- sem1

Experience Year Company Developed a platform for Dynamic Dashboard. [] Concept referenced from JIRA. [] Client can create his/her own widgets using Transactional Metadata. [] Data could be displayed in the form of Pie, Column or 2D Charts. [] Features like Advanced Search Query, download to Excel, Auto refresh and Option of selection and deletion of different attributes included. [] No maintenance required. Tools used (Development tools -H/w, S/w): JAVA, Spring, Hibernate, JPA, Struts, Ajax, HTML, CSS, JQUERY, JAVAScript, Bootstrap, Oracle SQL. Objectives of the project: Developing a platform for Dynamic Dashboard. Outcomes of the project: Platform was created. Major Learning Outcomes: Got the opportunity to learn new Technologies. Worked with R&D of the Organization. Brief Description of working environment, expectations from the company:Well 250 words are too less for this. Firstly, the organization doesn't have a proper system in place for Hiring Process. The company initially said they will judge interns on the quality of their work, but 2016-Nucleus Software Export Ltd as soon as the last month approached they changed their own policy saying we(interns) have to go through 17-. Noida an online assessment test for which cutoff was 50%. A surety was given by them that if a person is unable sem1 to clear 50%, he/she will be judged on his coding skills (again change in policy). The top management of the organization weren't able to decide till this very point (14th Dec 2016) to whom PPO was given (I am sure they are still in a dilemma). In the end, when we approached Company's Product Head for the feedback, these were the words he said "We are running a business here. Why should we hire people from TIER 1 college and give them x salary when we can get it done by giving x/2 to some other college student"? I am not judging anyone here but they always taunted us by saying you belong to TIER 1 college and still in the end they couldn't come up with a proper valid reason why we were rejected. They kept saying that many parameters were involved but they didn't disclose any. I wouldn't recommend any junior to join the company if he/she is interested in getting a PPO. PS-2 started off with initial training for 2 months to improve our technical skills mainly JAVA, Spring, Hibernate, JSP, Servlets and database queries. Then we started software development in FinnOne Neo Loan Management System. Areas where I worked include Excel file Uploader and Downloader using Spring Batch Excel and Apache Poi APIs, fix for Malware Injection through File content during file upload and 2016-Nucleus Software Export Ltd Download. Tools used (Development tools - H/w, S/w): JAVA, Spring, JSP, SQL Objectives of the project: -17-. Noida Development of additional features in the existing product FinnOne Neo LMS Outcomes of the project: sem1 Successful feature addition Major Learning Outcomes: Learnt to face challenges in the vast product Brief Description of working environment, expectations from the company:Team was very good and encouraging at every step.Employees have to work for long hours and it needs to be changed. Our project was to build a new product for the companyEnterprise Content Management which will later be integrated into their existing products. As it was a new product we had lots of interaction with senior managers and often had to refactor our code according to user stories. The company has their own framework built using Spring and Hibernate which was used as the backbone of the project. We learned quite a lot here from building client side pages using JSP and JQUERY, writing hibernate queries to writing controllers and services for the web-app. The work environment is fast paced and you are expected to learn a lot of new things required for the project, for which you are provided ample technical support by your peers. On joining we had one month of technical training so we didn't face much problems during our development stage. Tools used (Development tools - H/w, S/w): Spring, Hibernate, maven, MySQL 2016-Nucleus Software Export Ltd Objectives of the project: To build a new product for the company-Enterprise Content Management 17-, Noida Outcomes of the project: Milestone version is ready to showcase to potential customers and take their sem1 feedback. Major Learning Outcomes: Core JAVA, SQL, Spring, Hibernate, JSP Servlets, JQUERY Brief Description of working environment, expectations from the company:Overall our experience with the company was quite good. The environment here is very supportive and they try to accommodate the needs of every intern. Being from BITS Pilani you are treated well and their expectations are also accordingly high. We were provided with one week of lodging and had to undergo one month of mandatory training on certain technologies like Spring. After evaluation and asking your interests you are allotted to different teams and the work given to you is mostly development and you are expected to perform on par with other employees. From the perspective of learning and career opportunities, this company is very good.

Company	Experience	Year
Nucleus Software Export Ltd , Noida	Training: one and half months of training of spring /hibernate framework, we have created a sample of web application based on it. We were graded according to that and sent to different departments. First task I was asked to create a customized tag file with its own CSS JS and TLD. It has to be created over their customized framework and this project took around two months and was successfully committed to their product. Then some of the issues or blockers were found out by testing team which were further resolved by me for next 10-15 days. Then second task i was given was to recreate the menu bar of their application and solve the overloading problem and UI problems in that. Finally, after two weeks i have committed the recreated new responsive menu bar for their product. Tools used (Development tools - H/w, S/w): Maven, Eclipse, SVN Tortoise Objectives of the project: -To look out the problems in the previous tag file and recreate according to the product team requirements. Outcomes of the project: The project is now a part of the product Major Learning Outcomes: CSS, TLD, JS, AJAX, JAVA, SPRING, HIBERNATE, learnt much about web development Brief Description of working environment, expectations from the company:Environment differs from department to department in this company. Work pressure is too much in some department. HR policies are not firm, they themselves don't stand on their sayings. Don't expect PPO from this company as they will first take full advantage of you through work as you are capable enough to work / sort their product problems but finally they may say your work was not up to the mark as expected, after completion of project. I guess they understood the BITS year to year system of PS and they are thoroughly utilizing our capabilities by paying us small as an intern because they won't get this cheap labor for 6 months for their expected work from anywhere else.	2016- 17- sem1
Nucleus Software Export Ltd , Noida	Development of Enterprise Content Management, using advanced JAVA Tools used (Development tools - H/w, S/w): IDE: Eclipse. Language: Advanced JAVA, JAVAScript(JQUERY), Tortoise SVN Objectives of the project: To create a product for document management system (Ex: Loans) Outcomes of the project: Version 1 of Product was almost developed for banking system. Major Learning Outcomes: Bootstrap,SQL,Advanced JAVA(Spring and Hibernate),MVC.JQUERY Brief Description of working environment, expectations from the company:Working environment depends on team. My Working environment was fine I would say better than I expected. At first timings might seem an issue (Weekly 45hrs and 7hr/day minimum), but it won't bother afterwards. While working here, you would get a feel of how products for banks are designed and various complexities in it.	2016- 17- sem1
Nucleus Software Export Ltd , Noida	Added Right-to-left support in BIB (Business Internet Banking) Application for the company's clients in Middle East UI development was done using Bootstrap, JSP, JQUERY and HTML/CSS. Functionalities and Features of the same are: Right to left text-input fields Chosen drop-downs, tables, tooltips etc. in RTL format Horizontally-Flipped layout including dropdown main menu and side menu Tools used (Development tools - H/w, S/w): JAVA, Spring, Hibernate, Bootstrap, CSS, HTML, JAVAScript, JQUERY, AJAX, MySQL Objectives of the project: The key focus of the project is to develop a way such that it automatically mirrors your site's content for Right-to-left languages whenever user switches the locale Outcomes of the project: After the necessary changes being made, the application is able to support left-to-right environment for entering, editing, and displaying text. Major Learning Outcomes: These 5 months have been a good learning experience for me. I got the opportunity to acquire various technical skills and expand my soft skills while working at Nucleus. I learned how to handle criticism with grace, which also built my confidence in a professional setting. I have also grown professionally through building a strong network with fellow Nucleus employees and interns. Web development is a growing field with lot of modern technologies being developed. During my internship, I had the freedom of learning about the ins and outs of these technologies along with some frameworks like Spring, Hibernate. Brief Description of working environment, expectations from the company: Nucleus software is an amazing company to work with. It offers both technical and professional enhancement as one can learn lot of things here. It has a great work culture and good working environment. Mentors and managers are very polite and supporting. I expect the company to have consistency in its policies towards the selection process of interns for preplacement offers.	2016- 17- sem1
Nucleus Software Export Ltd , Noida	During PS-   we had to work on various technologies which include JAVA8, Hibernate, Spring, MVC framework, etc. First, we were given short training and then teams were allotted. My work was in their product FinnOne which is a lending software. The work was challenging and had great learning opportunity. Objectives of the project: Upgrade Bootstrap and JQUERY Outcomes of the project: Upgraded Bootstrap from 2.3 to 3.3.7 and JQUERY from 1.7 to 2.2.4. Major Learning Outcomes: The work given to me was implemented in their main product. I got to learn how a large-scale application is built and maintained. Since my work was in frontend, I got to learn various technologies used in frontend development. Brief Description of working environment, expectations from the company:Working environment is good. The managers are good and supportive. Thereis a lot of work load.	2016- 17- sem1

Experience Year Company First we started off with basic JAVA concepts like polymorphism, inheritance and abstraction etc. Then we moved on to learn database i.e. MySQL along with Servlets and JSPs. We built a maker-checker web-app using all these concepts. After that, we moved on to Spring and hibernate and rebuilt the web-app using these new concepts. Then our respective teams were allotted and we started off with the work. I was involved in FinnOne Loan Management System and built a file uploader with the help of Spring API which was used in their rescheduling engine. I also worked on making validations for excel files. After that I upgraded the existing versions of Bootstrap and JQUERY in the Loan Management System with the help of regular expressions in JAVA. Side by side I was also given a Business training about their existing product, database management, receipt and payment engines of the system etc. Tools used (Development tools -H/w, S/w): Core JAVA, SQL, JQUERY, Spring, Hibernate, JSP Objectives of the project: To make the file uploader a public utility (for intra-Nucleus depts.) and understand all the sub-engines of the loan management system Outcomes of the project: Uploader has been merged successfully with the rescheduling engine of FinnOne Loan Management System. The work for its extension to support .csv and 2016-Nucleus Software Export Ltd .xlsx files is under process. Major Learning Outcomes: Core JAVA concepts, Spring, SQL Brief Description of 17-, Noida working environment, expectations from the company: Working here with Nucleus was totally a different sem1 experience all together. We started off in a learning environment where we were given proper training about the Core JAVA concepts, Spring etc. This was really beneficial because few of us were new to all these concepts and those who weren't, they also got a chance to brush up their concepts again. Everyday there used to be lectures that we had to attend and where learning was actually fun and after those we were given tasks/assignments to complete each day that we had to finish. In the beginning, we used to work from 9-5 and then we had an option of going to their rejuvenation center which has TT and pool tables along with carom, gym and some music equipment's. After 2 months of training, we were allotted our teams and we began our work. Work and life balance has to be maintained and that again depends on the team you are in. Some managers themselves leave by 5 and some start off their main work in the evening by 5 and work till late in the night. So, working hours is not something that is fixed in this company. Rest, everything was good, people are friendly and really helping and the best part is that it already has a lot of BITSians so it is definitely one of the very good PS stations that one can consider working in. We had to work on various technologies include JAVA8, Hibernate, Spring MVC framework, Web Development, etc. First, we were given short training and then teams were allotted. My work was in their product FinnOne which is a lending software. The work was challenging and had great learning opportunities. Objectives of the project: -Upgrade Bootstrap and JQUERY Outcomes of the project: 2016-Nucleus Software Export Ltd Upgraded Bootstrap from 2.3 to 3.3.7, JQUERY from 1.7 to 2.2.4 and other JQUERY Plugins. Major Learning 17-, Noida Outcomes: The work given to me was implemented in their main product. I got to learn how a large-scale sem1 application is built and maintained. Since my work was in frontend, I got to learn various technologies used in frontend development. Brief Description of working environment, expectations from the company:Working environment is good. The managers are good and supportive. There is a lot of work load. Work-life culture is not well maintained here.

Experience Year Company Created Simulators for various Banking Messages which are an integral part of any Banking Transaction Software. Tools used (Development tools - H/w, S/w): Core JAVA, Spring, Hibernate, Weblogic Servers, Tomcat Servers Objectives of the project: Simulation Of Banking Messages Outcomes of the project: Simulator Created for Different Banking Messages. Major Learning Outcomes: JAVA Development Tools Brief Description of working environment, expectations from the company: Nucleus Software Exports Pvt Ltd has both Bank lending and transaction software for the Practice School Program. I am in the Bank Transaction Software Department. Here I have worked on creating simulators for various banking messages which are an integral part of any banking transaction in core JAVA with the help of spring and hibernate. For simulators, I learnt and used a WebLogic and tomcat servers. The learning here at Nucleus Software Exports Pvt. Ltd is at par to the industry standards and the work culture is quite amicable. Regular meetings with the mentor and the team helped me learn about the process of the development of the various products and their review. I think this exposure to the industry will definitely help me in my future endeavors. I learnt how to actively inquire into the progress of your own work and got feedback from team members and mentors to tone my skills and adapt to the changing demands of the project. This was an opportunity to learn from everyone around, actively discuss and establish a network with professionals. Overall the PS-II has been a great learning opportunity and a very efficient exposure to the 2016-Nucleus Software Export Ltd industrial applications of the technologies learnt. Bangalore Mentor Designation: Project Lead -17-. Noida Engineering Work Done by intern include UI changes to make it HTML5 compatible and modelling process sem1 flow integration with OFSAA. Prefers interns with hands-on JAVA, JSP, SQL Designation: Project Lead -Engineering Work Done by intern include enabling multibrowser compatibility of oracle's Data Management Tool by UI re- design. Prefers interns with hands-on JAVA, JSP, Oracle database Designation: Team Lead - Engineering Work Done by intern include creating user interface for exporting meta data from client database through connector definition functions. Prefers interns with hands-on JAVA, JSP, Oracle database and expects the right attitude to try the experiments to the next level Designation: Software Engineer - Engineering Work Done by intern include creating a JAVA parser solution to identify and list the dependencies between project module. Prefers interns with hands-on JAVA, JSP, Oracle database Designation: Project Manager - Engineering Mentor A white paper was presented internally at the OFSS by the intern stating the research result. Work Done by intern include a research work on decision tree analytics on financial data and constructing comparative interface for time series financial data analysis. Prefers interns with ability to learn given technologies with ease and think creative solutions Faculty Industry welcomes students with good professional attitude in approach, analytical problem solving skill, ability to learn and adapt to given requirement/project. With respect to OFSS, its happy to welcome hands on skills on following technologies: >JAVA > Web Technologies - Scripting Languages > Data base > BPEL > Data structures > Machine learning Student Parsing of SQL queries and creating excel, Parsing of Java File. Modification of an existing screen Tool used (Development tools - H/w, S/w): Antlr, Program Structure Interface, Spring Boot. Objectives of the project: 2019-Nucleus Software Export Ltd Automation Major Learning Outcomes: Improves programming skills, Learned new technologies Details of 20-. Noida Papers/patents: Brief Description of working environment, expectations from the company: The working sem1 environment was quite good, Seniors were helping. Academic courses relevant to the project: Data Structures and Algorithms, OOP, Compiler(Optional) Design a Question Answering System based upon intent based search point to a paticular unique answer and not to a set of answers. Tool used (Development tools - H/w, S/w): Eclipse IDE, WinSCP, Putty Objectives of the project: The aim of the project was to get answers to any intent based question upon pre-defined text. Major Learning Outcomes: Got to learn about designing of User Interface, ajax 2019-**Nucleus Software Export Ltd** calls,maven project designing,API designing and training and testing neural network models. Details of 20-, Noida Papers/patents: Brief Description of working environment, expectations from the company: Nucleus sem1 Software is an Indian IT company in the Financial Services sector. The working environment is good as the mentors are helpful and so are the sub-mentors. We got to work in the R&D team of the company. Academic courses relevant to the project: Machine Learning My project was vehicle monitoring system .The project keeps a track of the cars that are inside the company premises.if a car enters then the count is incremented.it is a extension to the faredge application.it is related to object detection. Tool used (Development tools - H/w, S/w): Java,spring 2019-Nucleus Software Export Ltd boot, opency, python Objectives of the project: This project is aims to track the number of spots filled. 20-, Noida Major Learning Outcomes: I learned python, java, spring framework and basics of ML Details of sem1 Papers/patents: Brief Description of working environment, expectations from the company: The working environment is very good.you have lots of free time if you joined this company.you can get PPO if you worked hard. Academic courses relevant to the project: Neural net and fuzzy logic Student

Company	Experience	Year
Nucleus Software Export Ltd, Noida	Good projects are available in all CS fields-Java development, Web Development, Shell scripting, Machine learning etc. Tools used (Development tools - H/w, S/w): Java, Jsp, JS, CSS, Spring, Hibernate, Maven Objectives of the project: Cannot be shared Outcomes of the project: Cannot be shared. Major Learning Outcomes: Learned to work on a huge project and industry practices. Brief Description of working environment, expectations from the company: Decent work but need to work 45 hours a week. Interns can get good projects if they are willing to do the work. Academic courses relevant to the project: Computer Programming, OOP, DSA	2017- 18- sem1
Nucleus Software Export Ltd, Noida	APACHE TOMCAT CLUSTERING Tools used (Development tools - H/w, S/w): MAVEN, SPRING, APACHE HTTP SERVER, HIBERNATE, INFINISPAN Objectives of the project: LEARNING AND EXPOSURE Outcomes of the project: BEING USED IN FINAL PRODUCTION LEVEL CODE Major Learning Outcomes: JAVA, J2EE, WEB BACKEND Dev, MAVEN, SPRING, APACHE HTTP SERVER, HIBERNATE, INFINISPAN Brief Description of working environment, expectations from the company: CORE CORPORATE EXPOSURE Academic courses relevant to the project: DSA, OOP	2017- 18- sem1
Nucleus Software Export Ltd, Noida	Compared two search engines - solr and hibernate search. Tools used (Development tools - H/w, S/w): SOLR, Hibernate Search, Java Objectives of the project: Two find the efficiency of the techonologies Outcomes of the project: Hibernate Search is better in general conditions Major Learning Outcomes: Learnt the underlying technologies behind search engines Brief Description of working environment, expectations from the company: More flexible hours are needed. The organization should focus more on latest technologies. Academic courses relevant to the project: Object oriented Programming, DSA	2017- 18- sem1
Nucleus Software Export Ltd, Noida	Automated the complete process for testing the Soap and Restful web services. Created a simple application that only takes the credentials of the DB. Once the username and password are inserted it will automatically fetch data from the DB and starts hitting the Web services. Tools used (Development tools - H/w, S/w): Core Java, Web Services, Basic knowledge of Databases Objectives of the project: Automation of Web Service testing Outcomes of the project: Successfully Implemented it at Organizational Level Major Learning Outcomes: Learned quite a few technologies like Spring, Hibernate and DBMS. Brief Description of working environment, expectations from the company: Working environment was good. Employees and mentors were also of very helping nature. Academic courses relevant to the project: Object oriented Programming	2017- 18- sem1
Nucleus Software Export Ltd, Noida	Automated the complete process for testing the Soap and Restful web services. Created a simple application that only takes the credentials of the DB. Once the username and password are inserted it will automatically fetch data from the DB and starts hitting the Web services. Tools used (Development tools - H/w, S/w): Core Java, Web Services, Basic knowledge of Databases Objectives of the project: Automation of Web Service testing Outcomes of the project: Successfully Implemented it at Organizational Level Major Learning Outcomes: Learned quite a few technologies like Spring, Hibernate and DBMS. Brief Description of working environment, expectations from the company: Working environment was good. Employees and mentors were also of very helping nature. Academic courses relevant to the project: Object oriented Programming	2017- 18- sem1
Nucleus Software Export Ltd, Noida	The work I was supposed to do during this period was dynamic code generation using a database driven table model. Basically, I was supposed to generate a screen on which the fields will come just by entering some configurations in the table and you don't have to write even a sinle line of code for that. Tools used (Development tools - H/w, S/w): Java, JSP, DBMS, JS, Hibernate and Spring Framework Objectives of the project: Dynamic Code Generation Outcomes of the project: Dynamic Code Generation Achieved Major Learning Outcomes: Basic Knowledge of Programming and DBMS Brief Description of working environment, expectations from the company: The teammates were very nice and helping to me. They helped me at every step of the project. However, initially we were not given any training on the product itself which we will be working on. So, in that respect, some improvement can be expected. Academic courses relevant to the project: Introduction to Computer Programming and OOP	2017- 18- sem1
Nucleus Software Export Ltd, Noida	My project focused on automation of deployment on Application server using GUI and command line scripting. Tools used (Development tools - H/w, S/w): Net Beans,Weblogic,Eclipse Objectives of the project: Automation Outcomes of the project: Automate the process of Deployment Major Learning Outcomes: How to build a GUI,command line scripting. Brief Description of working environment, expectations from the company: The work environment in Nucleus Software is good.The mentor is really helpful with any problem that you face.The company has high expectations from a Bitsian which sometimes is tough to reach. Academic courses relevant to the project: DSA,OOPS,CP	2017- 18- sem1

Company	Experience	Year
Nucleus Software Export Ltd, Noida	Worked on Dialogflow to create a chatbot for helping with loan applications, and also created an asset tracking device based on Arduino. Tools used (Development tools - H/w, S/w): Dialogflow, Arduino, Neo-6M module, SIM900 module, node.js, Cloud services Objectives of the project: Create a chatbot and an asset tracking device. Outcomes of the project: Created a chatbot and an asset tracking device Major Learning Outcomes: Proficiency with Dialogflow and Arduino chipset, basic node.js commands Brief Description of working environment, expectations from the company: Working Environment healthy and fruitful, good PS station Academic courses relevant to the project: OOP, Computer Programming	2017 <sup>.</sup> 18- sem1
Nucleus Software Export Ltd, Noida	Created a Java Swing based utility to setup the FinnAxia Application on a developer's system. Tools used (Development tools - H/w, S/w): Java Swing, Batch Scripting, Apache Maven, Apache Ant Objectives of the project: Automated Setup of FinnAxia Web app Outcomes of the project: Significant reduction in time of setting up of FinnAxia Major Learning Outcomes: Learned to work on auto build software like Maven and Ant. Brief Description of working environment, expectations from the company: Working environment was really good. Academic courses relevant to the project: OOP and OS	2017- 18- sem1
Nucleus Software Export Ltd, Noida	Developed An analytics tool based on deep learning, used to pinpoint anomalies in day to day bank transactions and report the nature of anomaly along with detailed description. The tool was designed to work in both synchronous and asynchronous modes where the user can choose whether to take action by halting business or to just raise an alert. Tools used (Development tools - H/w, S/w): Spring, Hibernate, Kafka, deep learning 4j Objectives of the project: The objective was to build analytics capabilities in the existing product Outcomes of the project: Built an intelligent neural engine to perform fraud analysis Major Learning Outcomes: Software Design, Scalable Design, RESTful web services, Elastic Search Brief Description of working environment, expectations from the company: The work in the company depends on the team alloted. Some teams are doing state of the art research while some maintain product. If one shows interest, there is a lot of work in R&D. The company has people in the higher management who are open to new ideas and are ready to try them out. Academic courses relevant to the project: Machine Learning, OOP, Computer Architecture, OS, Neural Networks, Non-Linear Dynamics, Maths 1&3, DSA	2017 <sup>.</sup> 18- sem1
Nucleus Software Export Ltd, Noida	I've done 2 projects. One was developing an asset tracking device which is used to track an asset and send the data through an HTTP request to a database and check if it is violating any predefined parameters (speed or geofence). Another project was Google home based loan lending assistant which is used to apply or enquire for a loan and various other services. Tools used (Development tools - H/w, S/w): Java, C, SQL, JavaScript, JSP, jQuery, JSON, SpringBoot Objectives of the project: Asset tracking device was developed to track devices given to customers with low credit score. Loan lending is providing a platform for people to apply for loan for home in a simple way. Outcomes of the project: Learned a great deal of languages like JavaScript and JSP which I had a little experience in. Also worked in SpringBoot which has improved my understanding of Spring MVC. Major Learning Outcomes: Learned a great deal of languages like JavaScript and JSP which I had a little experience in. Also worked in SpringBoot which has improved my understanding of Spring MVC. Brief Description of working environment, expectations from the company: Working environment is nice. The work they usually do is mainly on JavaScript, JSP and they give you training prior to that so its not a problem. Overall, its a good company to start your career. Academic courses relevant to the project: OOPS, DBMS	2017 <sup>.</sup> 18- sem1
Nucleus Software Export Ltd, Noida	1.)Arduino Based Asset Tracking System - It is to help the relation between bankers (Mostly Auto lenders and Agent based companies) and the customers(for example users with bad credit score) to borrow money without risking the portfolio of the bankers/lenders. It's main functionality was to keep track of the asset as well keep it in a fence and check the behavior of the asset movement. 2.)Google Dialog flow based personal assistant-Used google based dialog flow environment to design a chat-bot which is context aware and stores the data (as per business model required) in the database .its main use to ease out the process of giving information to bank .it can be accessed globally with more than 14+ language support. Tools used (Development tools - H/w, S/w): Arduino UNO, GPS NEO -6M, GSM 900a, DialogFLow, Java, Hibernate, MYSQL, VM, Spring-BOot, WebServices Objectives of the project: 1) To track the asset(Security for own portfolio) . 2) To ease the form filling process and other easy taks like checking next emi Outcomes of the project: the work was appreciated by the executives as well as managers and they are using the concepts in their main product also. Major Learning Outcomes: Now confident in one language not just i can code but can definitely handle any business level problem. Brief Description of working environment, expectations from the company: Working environment was good. Even though we are not directly working on the product but are idea and concept was used in one of their product. Company should give more work related to their product not just the Mentor's dream to interns. Academic courses relevant to the project: OBJECTIVE ORIENTED PROGRAMMING.	2017 <sup>-</sup> 18- sem1

Experience Year Company Worked with DevOps team at Nucleus- worked on developing shell scripts, building product installers (using Java Swing), and wrote scripts for server deployment (specific to Oracle Weblogic) and server clustering (for Apache Tomcat). Tools used (Development tools - H/w, S/w): All work was software related, but there are no prerequisites. Formal training is provided for 1 month, with ample time for students to pick up the relevant skills-> Utilized Core Java, J2EE, Java Swing, Spring MVC and Hibernate Frameworks, JGroups, Infinispan, Maven, BASH scripting, Apache Tomcat, Oracle Weblogic, JavaScript (for front-end only), MySQL, and Apache JMeter Objectives of the project: Deployment was successfully set up, and simultaneously, improvements were made in the installation wizard and installation process for the product Outcomes of the project: Deployment was successfully set up, and simultaneously, improvements were made in the installation wizard and installation process for the product Major Learning Outcomes: Acquired new, relevant technical skills that could not have been taught as effectively in a classroom setting; Acquired an in-depth understanding of hierarchies in an IT organization, and the job and expectations from and of various hierarchal members. Acquired an understanding about the various kinds 2017-**Nucleus Software Export** of sub-domains that come under the broad categorization of 'SOFTWARE ENGINEERING.' Brief Description 18-Ltd, Noida of working environment, expectations from the company: BITS interns are put in the RnD teams, where sem1 they are expected to produce new solutions to old problems. For instance, one of the tasks that I was given was to create an optimized number-to-text converter, which works with Machine Learning, Deep Learning, Artificial Intelligence, or existing APIs, and is platform-independent. Given that the interns are from a Tier 1 college, there is greater expectation on them to meet the given deadlines, and they are expected to be able to cope up with more difficult tasks than their intern peers who maybe from colleges of a lower tier. For BITS interns, it is expected that they be able to manage multiple assignments at the same time, without any dip in the quality of the work, and without slowing down the project deadlines. One of the biggest positives about Nucleus is that the training is useful, the work is instructive, and it is for the most part, actually implemented in the year-end product release, therefore students get an actual feel for what it's like to work in a software team, and they also get to experience the various stages in the life of a software product (development, testing, integration, deployment, etc). Academic courses relevant to the project: Object-Oriented Programming (Not a Pre-requisite, though) I've built a monitoring tool for them through with they can proactively know what exactly is going wrong with their web-application servers in real time and take necessary action. Tools used (Development tools -H/w, S/w): JAVA,BASH SCRIPTING,SPRING FRAMEWORK,HTML, JSP, JAVASCRIPT Objectives of the project: MONITORING AND ANALYSIS Outcomes of the project: THE UTILITY IS BEING DEPLOYED ALL OVER 2017-**Nucleus Software Export** NUCLEUS AND IS LIVE. Major Learning Outcomes: TECHNICAL EXPERTISE IN JAVA, BASH SCRIPTING Brief 18-Ltd, Noida Description of working environment, expectations from the company: Work environment was great, lot of sem1 help from my mentors. Work load was a bit much but it was a big learning opportunity and I feel more prepared to face the corporate environment. Academic courses relevant to the project: OBJECT ORIENTED PROGRAMMING, DATA STRUCTURES AND ALGORITHMS

Experience Year Company I developed an artificial assistant to guide a new user through loan lending process through voice and chat based conversations. It was run through multiple test cases and rebuilds to make it smart enough to understand the context of user input and act accordingly. I coded for it to handle user specific loan lending/handling functionalities (loan termination, prepayment, due date, due amount, etc). I then created a real-time database to save all the query based user data into unique documents assigned to every unique user after assigning them unique identification codes. I then coded for the assistant to be able to tell the difference between a new user and an old one (old loan applicant). After development, I integrated the assistant with Google Home device functionalities, and Google Assistant on Android phones. It now essentially works on all smart devices, with options to extend it to wearables, headsets, etc. Tools used (Development tools - H/w, S/w): Software tools - Dialogflow, Firebase Objectives of the project: The broad objective of the project was to be able to develop an artificial assistant that could talk to a user and guide him/her through the loan lending process. The assistant should be intelligent enough to understand the context of the user input and act accordingly within a second. It should be able to secure user details via 2017-**Nucleus Software Export** systemic queries to the user and store the same in a database after assigning a new user a unique 18-Ltd. Noida identification code. Outcomes of the project: The project was able to achieve all the objectives set forth in sem1 the project vision. Major Learning Outcomes: Learnt a good deal on Artificial Intelligence, everything regarding an industry grade software development (from conception, to development, to testing and deployment). Also learnt Spring and Hibernate frameworks and their use in software development. Brief Description of working environment, expectations from the company: Being here at Nucleus Softwares is an amazing experience to have as an IT aspiring undergraduate. When you start your internship here, you are taken through a two month training program under Training Wing of the company. Those two months are the most you'll ever learn about everything related to software development and come to speed with the academic requirements therein. After the initial two months, you are deployed on the product floors where you are assigned to a mentor who comes up with an innovative project for you to work the remaining 4 months on. The projects are (I feel) very ambitious and demanding, but if you stay put, you learn more than you ever could after 3 years at college. The working environment isn't the best, but it's not horrible either. Academic courses relevant to the project: Artificial Intelligence, Data Structures & Algorithms, Object Oriented Programming Student 1. Ran 2 benchmarks to evaluate the performance of different RPCs. First benchmark for used to evaluate the CRUD(Create, Read, Update, Delete) RPCs. The second was use to evaluate the performance of frequently fired queries to IDF 2. Manual testing and automation of different features which are added. Over the period of 5 months, wrote around 260 tests and filed 18 bugs found while testing. 3. Creating an end-to-end documentation for IDF along with a try me editor where IDF users can try the RPCs in real time. Tool used (Development tools - H/w, S/w): C++, Python, HTML5. Javascript CSS Objectives of the project: Wrting tests, Running benchmarks, Creating an online editor Major Learning Outcomes: Writing clean and 2018-NUTANIX BANGALORE efficient python code. Creating an hosting a multithreaded online editor. Brief Description of working 19environment, expectations from the company: The environment is very encouraging to learn different sem1 concepts. The team members are very patient, helpful and supportive and cleared every doubts that I had while working on different projects. Academic courses relevant to the project: Object Oriented Programming, Computer Programming, Software Engineering. Name: Dhruv Jogi (2015A7PS0024G) Tool used (Development tools - H/w, S/w): Python Objectives of the project: Better dynamic placement of VMs Major Learning Outcomes: Cloud computing, Git, Linux Academic courses relevant to the project: Machine Learning, Operating Systems Name: Abhishek Nelaabh Ghosh (2014B2A70899H) Developed upgrade module for one of the components of Nutanix known as NCC for both on-prem clusters and cloud enterprise clusters known as Xi-clusters. Also did the testing of the upgrade code written for both happy and sad part. It was a great learning experience in terms of development as a corporate employee and how to approach a problem in the corporate field. Tool used (Development tools -2018-H/w, S/w): Python, JSON, Shell Script, YAML Objectives of the project: To develop upgrade module for **NUTANIX BANGALORE** 19-NCC, one of the key components of Nutanix Major Learning Outcomes: Learnt about the usefulness of sem1 parallel threads and how they save much more time in the real world. And how OOPS help different packages to interact with one another to achieve a goal. Academic courses relevant to the project: OOPS, OS Mentor Designation: ASIC Manager CPU Comments: outstanding student characteristics, what do they look for in interns

Company Experience Year

Nutanix is a fast growing company in the fresh new field known as cloud computing. It has crossed more than one billion in market value within ten years. It has achieved this feat keeping the employee comfort as paramount. Free food that can give a four star hotel, a run for its money, re-imbursement for cabs, flights are few of the attractive benefits that lure in employees from elite companies like Amazon and Oracle. Nutanix is like the horn of Cornucopia when it comes to the welfare of employees. I got hired as Intern as part of the practise school program. Since I did not have to cross the rigorous interviews and myriad tests, I was grateful to be here. I was assigned as part of Xi-infra team. The team takes care of management of data center services. I was assigned a task to automate the setting up of a data center . The project was a full stack learning experience. There was development and ingenuity involved in making the workflow, some automations to make life easier and a bit of testing too. In the end, I got to setup an actual datacenter using the package that I made. It was a good experience where I learned valuable skills for working in an IT industry as well as an ignoble comfortable lifestyle. The important lesson is difference between the code of an undergraduate and an IT professional. While the novice can do away with concepts of abstraction, encapsulation and dump his code into a single file, the professional makes a well-listed code with intricate file dependencies to ensure that these concepts are implemented. Tool used (Development tools - H/w, S/w): Canaveral , CircleCI, Git, PyCharm IDE Objectives of the project: Develop of client to bootstrap a new datacenter Major Learning Outcomes: Professional way of writing code with emphasis on concepts like abstraction, encapsulation and linting. Details of Papers/patents: Brief Description of working environment, expectations from the company: Free food that can give a four star hotel, a run for its money, re-imbursement for cabs, flights are few of the attractive benefits that lure in employees from elite companies like Amazon and Oracle. Nutanix is like the horn of Cornucopia when it comes to the welfare of employees. Working environment depends on your team. Fortunately for me, my mentor was a

kind man. He guided me through the whole project with unfaltering enthusiasm. Academic courses

relevant to the project: Computer Networks, OOP

2019-20sem1

Nutanix Technologies India Pvt. Ltd. , Bangalore

Nutanix Technologies India Pvt. Ltd. , Bangalore I worked as a full stack developer in the SaaS team, though my work was more of UI work than the backend. As a part of the team, I went through the whole process of bringing data from the db to the backend, to the graphql layer and then to the UI which is quite a learning in itself. My major development tasks included: 1. Building a dynamic quote questionnaire in which the fields appear on the basis of the prices, types of products and the discounts applied on the product. It was a very interesting task and took some time to complete as there were a lot of corner cases and validations required. 2. Making UI pages for various kinds of products and writing the graphql queries for getting data from the backend. 3. Inline editing of quote line prices, discounts and quantities: It has to be the highlight of the internship work and I was appreciated for this. In total, the work was web development with my part stressing on ReactJs and GraphQl. The work was completely deadline driven with daily scrums and a totally professional environment. Was given all the help and support I needed to do my bit. Tool used (Development tools -H/w, S/w): Visual Studio Code, IntelliJ Idea CE, Robo3T, DBeaver, Postman, ElasticSearch Objectives of the project: Building a quote price configure product(Xcelerate) Major Learning Outcomes: I had never coded in JavaScript and was straightaway thrown into UI using ReactJs and using GraphQl. Setting up the project(Rules engine, SpringBoot microservices, UI, Graphql, ElasticSearch ) itself took a week. The learning curve is super steep here. Details of Papers/patents: - Brief Description of working environment, expectations from the company: The working environment of the company is top class. Most of the teams and the work is amazing too. Most of the very experienced employees are very humble. You can expect quality work here, be it any domain. Academic courses relevant to the project: OOP, OS, DBMS.

2019-20sem1

Company Experience Year I was assigned to the CALM (Cloud Application Lifecycle Management) team. The team mainly works in Python, Golang (back-end) and React.js (front-end). The first task was to implement a simple API in Python, for which I had to work with Flask. After that I had to write a plugin as a part of a new repo, using Golang and PostgreSQL for db; after this, I was regularly assigned tasks associated with that repo, writing a few other components and writing build scripts, Jenkins integration for the various components of the repo. Overall, it was quite a learning experience as my work involved working with various open-source tools (eg: OpenAPI generator) and participate in the various discussions with PMs related to my projects. Tool used (Development tools - H/w, S/w): Python, Flask, Golang, REST, OpenAPI, Jenkins, Shell scripting, Git Objectives of the project: Approval Plugin for the Plugin Framework Major Learning Outcomes: Worked 2019-Nutanix Technologies India with various open source tools, learned certain industry conventions regarding coding, designing APIs. 20-Pvt. Ltd., Bangalore Details of Papers/patents: Brief Description of working environment, expectations from the company: My sem1 team can be easily counted amongst the ones with the best work environment here, be it the co-workers, manager, or the quantity of work. Regarding expectations from the company, we had a talk by Nutanix at our campus in the last semester, where the emphasis was on how Nutanix treats its interns as employees, and initially, there may be some difficulty in adjusting to the work. It was actually true. Also, it helps if you've done courses like networks and software engineering (but your proficiency in CS subjects won't matter, if you get lucky with the team allocation process). Academic courses relevant to the project: Computer Networks, Operating Systems, Software Engineering, Data Structures and Algorithms, Database Systems

Company Experience Year

I worked on automation of satadom breakfix. This is used to host hypervisor in datacenters and the above procedure fixes a corrupted or broken one in multiple ways. Tool used (Development tools - H/w, S/w):

Python, shell scripting Objectives of the project: Complete automation of testcases Major Learning Outcomes: Testing framework in companies Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is very good. Supportive colleagues Academic courses relevant to the project: Python, OOPS Mentor Mentor comments: Major tasks done: 1.Create infrastructure for analyser and self-checking tests to verify the infrastructure 2.Building infrastructure for Performance monitor testing Along which them Kuleen help with some minor tasks as well to offload some team members Below are some of the key characteristics we saw over the course of the internship and some of the criteria's we used to gauge the intern • Improvement over the time, Kuleen has improved and showed that he can work independently over the course of internship • Proactive and asks relevant questions to understand the bigger picture of the assigned task and how it contributes to the project • Maintains detailed notes on tasks and takes feedback once tasks are done to improve on things • Motivated to finish assigned tasks on or before time • There were few instances where he showed out of the box thinking to come up with smart solutions to the problems faces • The tasks were completed on or before time with good quality • Showed good communication and understanding skill while learning about the assigned tasks by asking relevant questions. Was able to communicate what he is trying to do when getting help from other team members Mentor comments: Siddharth work on coherent interconnect verification during his internship in Nvidia. Siddharth quick to ramp up on Nvidia verification methodologies, showed a lot of interest in understanding the design functionality. Some of his achievements were: • He came up with a flow/process to measure the testbench performance. • Worked on stimulus development for verifying a coherent 2D mesh network • Coded a checker in SystemVerilog/UVM for an ordering block. Things which we look in interns: • A keen interest to develop better understanding the Hardware design and verification methodologies. • Sound basics in computer architecture, exposure to CPU pipelining, caching & coherency, paging concepts will help. • Some basic exposure to Verilog and System Verilog. • Good problem solving skills. Mentor comments: Pratyush was a good intern hire for Nvidia. He has good understanding and learning and debugging skills. He was assigned the task of primarily coming up with a quasi automation tool which would reduce the overall "man-hours" associated with regular tasks in our team. He understood the problem statement very well, had inquisitive interactions with us and gained knowledge about what are the finer details of our tasks and came up with the tool which fits the bill very well. We at Nvidia broadly look at interns with "fresh mindset" coming directly out of college and must be open to learn new technical topics and "ramp up" to the industry work culture. Pratyush is self-motivated and strives for task completion. He has all the qualities that is required to be successful in hardware or software industry. Brief write-up on PS-II station: The Hardware division of NVIDIA Graphics, Bengaluru deals with architecture, design, development and verification work related to GPUs and SoCs of NVIDIA. The work requires expertise in Digital Design, VLSI Design, Architecture Modelling of chips, Synthesis, Low Power Design, Circuit Design and Place and Route of complex VLSI chips. A large chunk of the work at each stage of the Chip involve Verification and Validation. Since the complexity is very large, entire design and verification process require a lot of automation. Hence such a work demands expertise in various scripting languages like Unix Shell Scripting, Perl, Python and Tcl/Tk. Programming languages like Verilog, System Verilog, System C and C++ are necessary for design and verification of such complex circuits. Knowledge of Computer Architecture is essential for working in NVIDIA chips. Of course it is known that the interns may not have expertise in all of the mentioned topics. But it is expected that the interns should be fairly good in on Digital Design, Computer Architecture, Microprocessors, Verilog, Unix Shell Scripting, C++ etc. Knowledge on Python, Perl, Tcl/Tk, System Verilog, System C, Low Power VLSI design will definitely reduce the ramp-up time. Moreover enthusiasm to learn, faster ramp-up, proactiveness, a positive attitude are must have qualities required for the industry. NVIDIA Authorities are quite helpful supportive in integrating the student interns into the mainstream activities. The interns work on live projects of NVIDIA and they often interact with the teams located across globe. Indeed it is a great opportunity for an intern to work in NVIDIA Bengaluru (both Hardware and Software

Nutanix Technologies India Pvt. Ltd. , Bangalore 2019-20sem1

divisions). Student

Company	Experience	Year
Nutanix Technologies India Pvt. Ltd., Bangalore	Worked in the tools and automation team of Nutanix. Worked on improvements in the pre-commit testing tool of Nutanix. Worked on refactoring a data simulator for Nutanix clusters. Also worked on integration of two databases of two internal frameworks. Tools used (Development tools - H/w, S/w): Ext-JS, Django, Python Objectives of the project: Improvements in existing internal tools. Outcomes of the project: Several features and bug fixes were added to the pre-commit testing tool. The data simulator code was made much more maintainable. Integration effects were studied and a report was presented to a team in US. Major Learning Outcomes: Good coding practices. Maintaining large code bases. Pythonic style of coding. Brief Description of working environment, expectations from the company: Very friendly people. Quite steep learning curve initially. They expect you to get your work done and good coding practices. Working environment is open style and you get big monitors and a Macbook.	2017- 18- sem1
Nutanix Technologies India Pvt. Ltd., Bangalore	Did UI automation using selenium software. Wrote a lot of test cases in python. Worked with django and mongo db Tools used (Development tools - H/w, S/w): django , mongo DB, selenium Objectives of the project: Increase the stability of UI testcases Outcomes of the project: The pass percentage of tests increaased to more than 90% Major Learning Outcomes: Learned advanced Python, and selenium. Brief Description of working environment, expectations from the company: The company is really terrfic and the employees are very helpful. Academic courses relevant to the project: Computer Networks Student	2017- 18- sem1
Nvidia Graphics - Hardware , Bangalore	Majorly the work done was to build TestBench and Verification infrastructure for RTL designs using UVM methodology and System Verilog Tool used (Development tools - H/w, S/w): H/w:- UVM, System Verilog, Perforce, Unix Objectives of the project: To Verify RTL design of MSS NVlink unit Major Learning Outcomes: Flow of UVM methodology, Understanding of System Verilog, Debugging techniques and tools like Verdi, Perforce, Flow of code and interfaces in NVIDIA Details of Papers/patents: None Brief Description of working environment, expectations from the company: Working environment was worthy of the company's status. My team, including manager and mentor were helpful throughout. Their was ample focus on understanding concepts and then applying them. Even, there were enough recreational activities to balance work culture. Academic courses relevant to the project: Computer Architecture, Operating Systems, Digital Design, ADVD	2019- 20- sem1
Nvidia Graphics - Hardware , Bangalore	: Tool used (Development tools - H/w, S/w): Linux, Python, Perforce, Confluence, MS Office Objectives of the project: GPU Performance Verification Major Learning Outcomes: Learnt how does corporates carry out the work, level of professionalism, a more interactive way of approach to problems and new methods. The primary job at NVIDIA was to work with the performance verification team. It mostly comprised of running various Details of Papers/patents: Brief Description of working environment, expectations from the company: The working culture is very good. The colleagues are very supportive and willing to teach. The hierarchy is very structured and the treatment and respect is the same for an intern as well as the directors. The working hours are flexible too. Academic courses relevant to the project: Computer Architecture, Microprocessors and Interfacing, Programming, Optimization	2019- 20- sem1
Nvidia Graphics - Hardware , Bangalore	The project involves redesign of the PCle iLA Configuration tool, and creating a class for the code-base to facilitate reusability for other tools through inheritance. The primary aims for creating a new tool are two-fold: providing an intuitive, user-friendly interface for the engineer, and improving maintainability by making it easier for developers to support future releases. This was done by implementing principles of Object Oriented Programming, cleaning up the existing code-base and writing new code wherever necessary Tool used (Development tools - H/w, S/w): Python 3, Bash, Confluence, Perforce, VHDL Objectives of the project: Design of GUI Based Tool Major Learning Outcomes: Python 3 Details of Papers/patents: None Brief Description of working environment, expectations from the company: The work culture at NVIDIA was very conducive for productivity. Everybody ranging from my manager to the HR department were always on hand for assistance. The working hours are flexible and there is regular feedback from authority figures to help you improve the quality of your work. The company didn't have any prior academic expectations. My manager gave me ample time to acquire the necessary skillset for my project. Academic courses relevant to the project: None	2019- 20- sem1

Company Experience Year

The idea behind this project is to design a serial communication interface between data converters (ADC, DAC) and logic devices (FPGA). Instead of generating the Register Transfer Level(RTL) using the traditional approach by handcoding the design in Hardware Descriptive languages, a popular methodology called High Level Synthesis is being used to do the same. This methodology uses C++ as the Design coding language and tools like Catapult Synthesis to convert the C++ code into HDL(Verilog) files. This reduces the effort of hand coding and the understanding of the design code becomes much easier. The Catapult Synthesis also checks for HLS coding violations and other errors in the design and generates an optimized RTL with a report containing the record of the entire synthesis process. Tool used (Development tools - H/w, S/w): C++, Verilog, Catapult Synthesis, Tcl scripting Objectives of the project: To create RTL design of a serial data interface using High Level Synthesis and analyze the results and statistics Major Learning Outcomes: High Level Synthesis, Object Oriented Programming Details of Papers/patents: Brief Description of working environment, expectations from the company: Nvidia is one of the best companies in its domain and has a wide range of interesting projects. You will be treated as an employee and the projects provided will surely help boost your knowledge. People here are always willing to help you regardless of the complexity of the issue. The working environment is really great! Flexible timings, no unrealistic deadlines(but they do expect you to get good results), and the most important part, Free lunch and snacks!! Academic courses relevant to the project: Digital Design, Object Oriented Programming, MuP Mentor Mentor comments: 1. What are the key results the intern has delivered? • Development and Porting of profiling and validation tools. • Familiarity with Python and C++. 2. What are the main strengths (skills & behaviour) demonstrated during this internship? • Attention to detail. -Properly understands why an experiment/task is being performed. • Confident and Assertive enough to get his doubts clarified immediately. -Has often chosen properly (in multiple instances) to when to try figure out stuff by himself vs. when to ask and learn quickly. • Diligent -Ability to perform related/follow-up activities(and not just blindly perform what was assigned). -Followed-up with folks from other teams to get the necessary designclarifications and code-reviews for his tasks. 3. What areas need improvement? • Competency in the following areas is not yet evaluated as the internship period did NOT cover extensive activities in these areas. -Fundamentals of Operating Systems and Embedded-Systems. -ARM architecture. Mentor comments: Work done: Safety certification for "verification tools used to verify QNX BSP". As part of this, all evidences are created for certification spanning from Requirement to verification of tool. He also worked on fixing Coverity issues in source. Highlights of major achievements: He was able to ramp up

quickly by grasping embedded concepts. He also identified/fixed many bugs within tool and its design. Outstanding student characteristics: Keen listener and good understanding skills. Expectation from interns: Good analytical skills, C language skills, understanding of embedded Linux/QNX concepts. Brief write-up on PS-II station: The Software division of NVIDIA Graphics, Bengaluru deals with architecture, design, development and verification work related to the software solutions for Automotive based on NVIDIA chips. The work requires expertise in C & C++ programming, Operating System, Linux internals, Build systems, Computer Graphics and Multimedia, Machine Learning and Deep Learning. Since the complexity is very large, entire design and verification process require a lot of automation. Hence such a work demands expertise in various scripting languages like Unix Shell Scripting, Python etc. Knowledge of Computer Architecture is also essential. Knowledge of good coding practices, adherence to associated standards and software engineering processes are necessary for building large and complex software like the ones this team develops. Moreover enthusiasm to learn, faster ramp-up, proactiveness, a positive attitude are must have qualities required for the industry. NVIDIA Authorities are quite helpful supportive in integrating the student interns into the mainstream activities. The interns work on live projects of NVIDIA and they often interact with the teams located across globe. Indeed it is a great opportunity for an

Nvidia Graphics - Hardware , Bangalore 2019-20sem1

intern to work in NVIDIA Bengaluru (both Hardware and Software divisions). Student

Company	Experience	Year
Nvidia Graphics - Hardware, Bangalore	Worked on Control Backbone Safety Verification. Carried out error injection tests in various cluster fabrics by coding the error injection sequence which used information from System Verilog objects generated via Perl script which parsed the data from yaml format file, in accordance with the syntactical rules of System Verilog. The System Verilog objects were generated in a pre-determined format in order for the sequence to easily access the required information from the object via class handles. The working error injection sequence and Perl script were then scaled to various cluster fabrics and passed. Used Perforce commands for management of various versions of codes in and out of web repository. Tool used (Development tools - H/w, S/w): System Verilog, Perl, UVM Objectives of the project: Successful passing of error injection tests as part of safety in Control backbone and other cluster fabrics. Major Learning Outcomes: Enhanced Debugging skills, Increased proficiency in System Verilog and Perl, Exposure to Chip architecture and Usage of Perforce. Brief Description of working environment, expectations from the company: Nvidia has a very conducive working environment. My mentor and team members were extremely helpful and always clarified all my doubts which helped resolve the issues being faced. The workload is a bit hectic but that is expected as the work at Nvidia is mostly on live projects. Work timings are flexible and games such as Foosball and Table Tennis are available for recreation. The interactions with the team were also very regular, it kept me updated about other team members' work and also helped in getting constructive feedback about my work progress. Overall, the internship at Nvidia was a very good learning and an enriching experience. Academic courses relevant to the project: Digital Design and Computer Architecture Name: Madhu Adav M J (2014A3A70217G)	2018 19- sem1
Nvidia Graphics - Hardware, Bangalore	In Nvidia I worked as a member of the SoC performance verification team. As we know memory is a limited resource. When running automotive usecases with multiple units running in parallel we need to ensure that the interconnect networks are fair and the bandwidth requirements for the different units are met. This ensures that the usecase meets the real time requirements. The work mainly involves running different automotive usecases to ensure that above requirements are met. In addition to this various memory subsystem knobs are changed and various background traffic configurations are simulated to identify potential problems in performance and to find optimal knob settings. After this data is generated, it is necessary to make scripts to identify and visualize trends and key data points. Tool used (Development tools - H/w, S/w): Perl, Python, C++, Shell Programming, Pandas Objectives of the project: Verifying the IP bandwidth requirements and impact on memory subsystem by running various usecase pipelines. Also analyzing performance and drawing conclusions for various Memory subsystem knobs and simulating background traffic with different configurations Major Learning Outcomes: Acquired professional proficiency in perl scripting, Python, C++ and shell programming. Also got experience in professional environment. Learned a great deal about a realistic memory subsystem and its components. Brief Description of working environment, expectations from the company: At Nvidia freedom is provided to complete your work but you are expected to complete the tasks within assigned deadlines. You are also expected to communicate with other team members in case of any delays or unexpected circumstances. Other team members are helpful in guiding and teaching you. You also have multiple opportunities to communicate with different teams. These factors make Nvidia a great place to work at. Academic courses relevant to the project: Programming in C, Object Oriented Programming, Computer Architecture, Operating Systems Name: Himabin	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	My work is on PCIe protocol, a widely used I/O protocol in the industry. PCIe follows a layered model for data transfer. My area of interest is in Physical Layer of PCIe, mainly on the byte striping/unstriping logic done in physical layer. Tool used (Development tools - H/w, S/w): Jasper, Verdi Objectives of the project: PCIe aims to ensure data transfer between two link patners at high speeds and with error detecting/reporting mechanisms. Major Learning Outcomes: Perl, Verilog, PCIe protocol Brief Description of working environment, expectations from the company: Nvidia has a very good working environment, my team has always been approachable when ever I was stuck at something. Academic courses relevant to the project: Communication Networks Name: Pranav Mohan (2015A8PS0470H)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	Functional Verification of Memory Subsystem Hub using SystemVerilog and UVM concepts. Modifying testbenches to detect bugs in RTL and fixing the bugs detected in the process. Perl Scripting was also used to improve the workflows present in the organisation. Tool used (Development tools - H/w, S/w): SystemVerilog, UVM, Perl, Verdi Objectives of the project: Performing Functional Verification on the Memory Subsystem Hub of the chip to detect and fix any bugs that are be present Major Learning Outcomes: Concepts of Functional Verification and Perl scripting Brief Description of working environment, expectations from the company: Working culture is great and all colleagues are approachable. Hierarchy is very horizontal and employees are always welcoming and helpful Academic courses relevant to the project: Analog and Digital VLSI, Computer Architecture, Operating Systems Name: G. SRI SAI SUSMITHA (2015AAPS0183H)	2018- 19- sem1

Company	Experience	Year
Nvidia Graphics - Hardware, Bangalore	Entire work was based on development of testbench for the xHCI controller. The team started to move towards a UVM based testbench from VMM. Specific tasks allotted were related to commands and transfers done to USB high/full/low speed devices. Tool used (Development tools - H/w, S/w): System verilog, UVM, Verdi, Git Objectives of the project: To develop a UVM based testbench for xHCI controller Major Learning Outcomes: Verification, System Verilog, UVM, xHCI, USB Academic courses relevant to the project: Object Oriented Programming, Digital Design Name: Neeraj Surawar (2015A8PS0400P) Tool used (Development tools - H/w, S/w): C++, Perl, Shell Objectives of the project: Performance modelling of SMMU and Integration Major Learning Outcomes: Understanding Memory Architectures and learning Design techniques. Academic courses relevant to the project: Computer Architecture, Object Oriented Programming Name: Varanya Prakash (2014B2A30960G)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	The work involved post silicon validation of GPU PCIe, this involved validating that the GPU is ready for mass production by running tests using internal tools to identify issues and resolve issues using knowledge of PCIe and the computer system. Tool used (Development tools - H/w, S/w): perl and linux Objectives of the project: Functional validation of GPU PCIe Major Learning Outcomes: Learned PCIe protcol in detail and saw how it is working actually in a system Brief Description of working environment, expectations from the company: The work environment is very good here, everyone is very helpful. Academic courses relevant to the project: Data Communication and Networks, Microprocessor Programming and Interfacing and Computer Architecture Name: Yashwardhan Singh (2014B5AA0759H)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	My work at Nvidia was to carry out the memory qualification and validation of GDDR6 memory on different memory systems. This falls under the post silicon domain and is the penultimate step before productization. Memory qualification is done to finalize the memory settings and achieve the required targets. Parameters such as AC timings, read write training, drive strength, termination etc are tested and verified through various Nvidia implementations. Tool used (Development tools - H/w, S/w): Linux, Perl Scripting, Shell Scripting Objectives of the project: To carry out the memory qual and debug Major Learning Outcomes: In depth understanding of the architecture of the DRAM and GPU. Perl scripting, Linux, understanding timing characteristics of the DRAM and GPU. Academic courses relevant to the project: Computer Architecture, Analog and Digital VLSI Design, Digital Signal Processing, Operating Systems. Name: Nitish Kulshrestha (2015A8PS0275G)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	The work was focused on improving the efficiency of the functional model, a large-scale behavioral simulation of the GPU which is written in C/C++. It was achieved for various GPU units by using techniques in: Advanced C/C++ (pre-compiled headers, explicit template instantiation), Compilers (GCC), UNIX and Perl Scripting. Tool used (Development tools - H/w, S/w): C/C++, GCC, UNIX, Perl Objectives of the project: Decreasing the build time of various units within the GPU functional model Major Learning Outcomes: Learning industry-level programming and verification Brief Description of working environment, expectations from the company: The environment was very conducive to productivity. I was thoroughly mentored about how to do things and given important work that would add value to the company. Academic courses relevant to the project: Computer Architecture, Compilers. Name: SAGAR TRIPATHI (2015A3PS0294H)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	Bringing the Hopper SOC top level together which included integrating IP's in Hopper SOC as well as building RTL for Hopper SOC. Other aspects of the project include generating the health of the top level as well as removing dangling pins to ensure the top level is in good health. Tool used (Development tools - H/w, S/w): NVIDIA internal tools Objectives of the project: HOPPER SOC Integration Major Learning Outcomes: SOC Integration, proficiency in perl scripting, System on a chip design Brief Description of working environment, expectations from the company: Excellent working environment facilitating holistic growth of a person. Academic courses relevant to the project: Digital Design, Microprocessors and Interfacing Name: Ankita Aggarwal (2015AAPS0192H)	2018- 19- sem1
Nvidia Graphics - Hardware, Bangalore	I was a part of the CPU verification team. The work was based on ARM architecture and revolved around testing and verifying the software compliance. Tool used (Development tools - H/w, S/w): Scripting in Shell and Python, Perforce Objectives of the project: Objective of the project was to get code coverage percentages up and automate the task of testing. Major Learning Outcomes: Learnt scripting, working on a software tree, using perforce and ARM architecture. Brief Description of working environment, expectations from the company: The working environment is very amiable and comfortable. The deadlines are not strict and you're allowed to work at your pace. Ample help is available for whenever you're stuck somewhere and people are really friendly. There are frequent outings and the entire internship process at Nvidia is very well handled. Academic courses relevant to the project: Computer Architecture, FPGA	2018- 19- sem1

Company	Experience	Year
Nvidia Graphics - Software Systems,	1)Added options of video effects such as slow motion/ time lapse to GFE Gallery. User can choose the video segment they want to have the effects on before uploading it to online forums 2)Designed a fully convolutional neural network model for game event/highlights detections such as kill feed for few of the games. This model has a very good inference speed and accuracy. Tool used (Development tools - H/w, S/w): Tensorflow object detection API, Keras, Visual Studio, Media Foundation, Python, cmake Objectives of the project: To automate the detection and saving of highlights from Nvidia's GFE in-game overlay. Major Learning Outcomes: Video encoding, Object detection models, video muxing, CNNS Brief Description of working environment, expectations from the company: Got a really great team. Everyone pointed out to right direction whenever I asked for help. All the facilities are top-notch. Offer chances depends on position availability in the team. Team allotment is based on Bio-data filled in psms website. Got to work on 2 major projects are few minor ones. Nvidia Pune is one of the biggest software development center of Nvidia outside Santa Clara. So, teams generally work on crucial projects to company. Academic courses relevant to the project: Machine Learning, Digital Image Processing, Data structures and Algorithms, Object Oriented Programming Name: Saylee Kanadje (2014B3A30772P)	2018- 19- sem1
Nvidia Graphics - Software Systems,	Automated the retrieval of profiling status for Game Ready Drivers. I was continuing the work begun by a previous intern so the backend infrastructure did not have to created from scratch, it had to be validated and fine-tuned. I created a UI that allowed the user to query the local database through API calls and SOAP requests. As my second project, I implemented a parser that would compare two logs obtained from different frame capture analysis tools and calulate a test statistic to establish the extent of similarity between them. This parser was deployed in automation for regression testing. Tool used (Development tools - H/w, S/w): Python, JavaScript, AJAX Objectives of the project: To reduce manual overhead by keeping profile bugs up-to-date for a particular title; To ascertain how closely the distributions of flip times obtained from two different frame capture tools resemble each other Major Learning Outcomes:  Exposure to UI development and gained familiarity with Python Academic courses relevant to the project: None of the available courses were directly applicable to my first project since they do not focus on frontend frameworks. Basic knowledge of statistics was helpful in the second project.	2018- 19- sem1
Nvidia Graphics - Software Systems, Pune	The project aimed in making improvements, solving bugs and adding support for new chips in a virtualized environment for simulated GPU testing. Improvements made in the infrastructure includes support of non contiguous system memory, robustness of various shell scripts involved, support of new chips, support of atomic read/write operations to system memory and renaming all automated driver validation platform components for tests running on our infrastructure to nomenclature. Non contiguous system memory support means, that the guest OS can be booted with any number of DIMMs, where the base address and the size of the DIMM can be specified as a parameter. Robustness of shell scripts involved modularizing all the scripts and adding support for hard failure in case of any command being failed while execution of script. Support of newer chips involved modifying the shell scripts involved in the infrastructure, which basically involved changing the simulated GPU, VBIOS and chip arguments. Atomic operations support on infrastructure involved making the read/write operations to system memory word separated, instead of byte separated which was supported earlier. Bugs solved during the project were, updating a Perl script to consider different remote machines until one live is found, issue in booting guest OS (Win7 64 bit) on the infrastructure. Updating a Perl script until one live is found involved keep pinging the machines in a loop, until a response is not achieved. Two GPUs couldn'*t be booted, since for one GPU, some functions were being called which were not expected (segmentation fault). Issue in Resource Manager involved writing specific values to specific registers, information regarding this has to be parsed from configuration file. Win 7 64 bit support involved attaching debugger (WinDbg), debugging for known issues and getting them resolved by collaborating with other teams. Tools used (Development tools - H/w, S/w): C programming, Shell and Perl Scripting, GDB (GNU Debugger) Objectives of the project: Imp	2017- 18- sem1

Experience Year Company Designed mobile app for setting up of multi display set up(Mosaic). Mosaic is an application for running multiple displays as a single large screen. The mobile application gives the user complete control over the mosaic service from the application itself. For this task the application was written in swift 3. Tools used (Development tools - H/w, S/w): Xcode, git, android studio Objectives of the project: to design a mobile 2017-Nvidia Graphics - Software application for Mosaic Outcomes of the project: Provided proof of concept of the app which would 18-Systems, Pune undergo further development. The application is able to set up Mosaic on a multi display set up. Major sem1 Learning Outcomes: Learnt about swift, IOT, and basics about websockets Brief Description of working environment, expectations from the company: the working environment is great. the hours are flexible,Interns are given as good projects as regular employees. Academic courses relevant to the project: OOP,DSA Nvidia Graphics - Software The goal was to make improvements to the kernel mode driver of NVIDIA™s Linux graphics driver by 2017-Systems, Pune increasing test coverage, improving build infrastructure and fixing numerous bugs. Test coverage was to be 18improved by adding tests to NVIDIA™s test servers. Test scripts for FreeBSD and Solaris were developed sem1 which procured latest driver builds from the local server and conduct basic sanity tests. A test application was developed for a new power saving feature which was to be introduced on Linux. An Automation script was written for encoding and decoding customer sent bug reports. A new kernel configuration detection test was written for specific kernel source functions. An Automated test was written to check kernel build success against all supported kernel versions. Bugs relating to Linux kernel mode driver module were solved as and when assigned. Tools used (Development tools - H/w, S/w): bash scripting, tcl scripting, c++ programming, perforce, git. Objectives of the project: Develop and deploy test scenarios for improving and automating test coverage of NVIDIA GPU kernel driver across various Unix platforms and also work on defect resolution to improve quality of NVIDIA GPU kernel driver. Outcomes of the project: Deployed several nightly and per change tests, solved several bugs, proposed driver build architecture enhancements. Major Learning Outcomes: Shell scripting, Unix programming, Debugging skills, working with linux kernels, Nvidia gpu architecture, version control systems, teamwork. Brief Description of working environment, expectations from the company: The Company has a very positive and flexible working environment. Academic courses relevant to the project: C programming, Operating Systems. Mentor Designation: Sr. ASIC Manager Dhruv contributed in critical areas and has made a good impact. He proved to be a good team player too and has gelled well with the team. He ramps up quickly too. His Key responsibilities: Chip Build enhancements. Dhruv worked on Chip Build enhancements where creating an Utility to help kick start a new project for Tegra. It has helped in reducing the kick start time from 5 weeks to 2 weeks. Dhruv ramped up on Perl/Python to create this Utility. Studied the build infrastructure Created Utility post his study Created wikis for the steps Everything was achieved as per plan and timelines. Partitioning Checks Dhruv worked on Adding checks to make sure we add Partitioning checks for Tegra. This will help in hashing out physical vs. front end issues early in project cycle. For this he had to ramp up on Partitioning hashes, Check requirement and them implement the checks. Goal was achieved. He showed good skills in digging up. Designation: Senior Architect, GPU HW Project Details(Key responsibilities): 1. Similarly: a. A tool/framework for identifying similar tests amongst directedperformance and appperformance nvpdm catalogs. b. Developed from scratch, in python, and uses a visualization frontend called bokeh for presentation/interactive UI c. Uses traditional machine learning techniques â€" PCA, mean-square cost 2. Determine performance coverage of directed tests a. tests Use Similarly (from above) to determine the coverage of the directed performance suite of gpu- b. Work-In-Progress 3. Statistical analysis of GPU performance monitors a. Use Pearson Coefficient to rate GPU PMs (collected during 1. above) to study existence of any relationships/patterns between GPU performance scaling and size b. Work-In-Progress Internship Assessment: • Met the primary objectives assigned to him as per schedule. • Showed initiative, diligence and an aptitude for independent thinking. • When presented with problems outside his scope of knowledge, demonstrated ability and willingness to learn. What we look for in interns/candidates: • Diligent, hard-working mindset o In pursuit of excellence we will fail, and we will fail often. Any candidate that fits into this culture of excellence must be intellectually honest even when the news is bad and a high work rate without getting fazed or lost by the inevitable failures that they will face along the way. • Aptitude for independent thinking o Unique problems need unique insights to be solved. This calls for creativity and independent thinking â€" even in the face of established ideas that may seem contrary. If the problems can be solved just by having the knowledge from a prescribed text then almost anyone can solve them. Designation: Verification Lead, Tegra-PCIe Comments on Monil Shah: 1) Work discipline and ownership: He is dedicated and takes good ownership of tasks and works on them. When he is stuck and provided a clue or direction he works well to get the closure on a given task. 2) Communication: He proactively asks questions to understand a given assignment. He will ping whenever he is stuck and seeks help. 3) Reviews: He initiates reviews for the code

for any small change on his own without being asked 4) He is more confident on PCIE Transaction Layer spec as of now and also exposed to some portion of logical physical layer. 5) Contributions: Monil contributed well for PCIe regression debugs and adding simple code fixes in the testbench. His

Company Experience Year

contributions are listed below. a. Regression monitoring. b. Merging of Coverage and numbers generation. c. Verification script modifications. d. PCIe spec reading and presentation. e. Regression failures debug. f. Test cases addition for PCIe Application Layer coverage holes. g. Started testbench fixes which were deprioritized earlier 6) He will work on TB fixes and triaging for the remaining internship period. 7) Areas for improvement: He can improve depth in PCIe spec knowledge and ask more doubts from spec understanding perspective. Designation: Sr. ASIC Manager Work done by the PS-II students: FPTR tests resurrection, Verification. Interactions with them: Good, Pro-active. Highlights of major achievements: enabling Bin Opt Verif - WIP Outstanding student characteristics: Dedication. What do they look for in interns: Dedication, Smartness, Agility. Designation: ASIC Engineer, Memory Subsystem Verification Work done by the PS-II students: In interns, we look primarily for the attitude to learn and solve any problems coming along their way. Design Verification is an interesting domain to work on due to a lot of challenges and complexities associated with the same. The attitude of attacking a problem statement by breaking into smaller problems, coming up with solutions for them and not hesitating to take help whenever blocked are some nice attributes we look for. Somesh helped in increasing productivity for the entire team by automating rerun of specific failures from test suite regressions as soon as they occur, he created another flow to generate coverage reports which is essentially the measure of quality of test suite and got exposed to design verification challenges by creating a checker for our pipelined design. The commitment and seriousness given to the tasks worked on and the attitude of unblocking himself by asking questions are his strengths. This enabled him in quickly grasping relevant concepts and to create some beautiful code. Designation: Principal Architect Work done by the PS-II students: Sowmya mainly worked on following 1) Enhancing the SCSIM+MMPLEX TB 2) Host1x SystemC model 3) Understanding the regression infra etc Sowmya was able to understand the host1x model. She fixed the model for issues reported by SW especially on error signalling in host1x. She was able to improve the Host1x regression from 60% to 75%+ Overall 1) She is good in SystemC 2) Understands the modeling infrastructure and flows 3) Has good ability to model and support SW team Designation: Manager, System Software Work done by the PS-II students: Khushal was involved with Linux toolchain and filesystem activities. He spent his time engineering test infrastructure to build confidence in the deliverables generated through use of toolchain. He was able to successfully debug and triage toolchain sysroot use case. Furthermore, he added features to the filesystem test script. A final part of his project included integrating GCC test suites into the test framework. A weekly meeting was scheduled to ensure progress and status were tracked. An appreciation is extended to Khushal for his contributions; he should continue to develop his software skill sets and knowledge in toolchain (development, testing, and usage), which will enable him to reach the next level achievement. Designation: Sr. Software Architect (Hardware Infrastructure Team) Work done by the PS-II students: Internship Assessment o Good studious temperament o Initially used to shy away from problems, but got better with time o Very responsive, provided regular updates o Strong problem solving o Finished all the goals of the project along with stretched goals o Project has been released and user have appreciated the efforts Top 3 strengths o Good problem solving o Good cultural fit o Right temperament Top 3 development areas o Take up computer science courses in the last semester o He should focus more on solving the problem rather than using workaround to complete the project. o Should not over stres Work done by the Student, interactions with them: Shubhi primarily worked on developing test scripts for display module. She also worked on analysing and documenting ioctl calls between userspace and kernel. Highlights of major achievements, outstanding student characteristics: We would like to appreciate the way she went around with the tasks assigned to her. She took up any task assigned to her, she's very well motivated and tries to get the work to conclusion. Takes feedback and is eager to learn. What we look for in interns: We don't expect any particular expertise from interns. But few things that can be improved: i. Better grasp on programming languages and computer science basics. ii. Prepare them on practical front. E.g.: Generic Linux usage, command line usage, Embedded systems basics, etc. iii. Improve PS application process to give students an idea of what they can expect to work-on after joining any given organization (may be feedback taken from older students can be provided to applicants). Finally, really appreciate the effort BITS has taken in terms of Practice School. I feel PS gives Students an experience of the real-world work environment. This will surely help the students in deciding on their future goals. Designation: Senior System Software Engineer Work done by the PS-II students: Work done by the Student, interactions with them: Shubhi primarily worked on developing test scripts for display module. She also worked on analysing and documenting ioctl calls between userspace and kernel. Highlights of major achievements, outstanding student characteristics: We would like to appreciate the way she went around with the tasks assigned to her. She took up any task assigned to her, she's very well motivated and tries to get the work to conclusion. Takes feedback and is eager to learn. What we look for in interns: We don't expect any particular expertise from interns. But few things that can be improved: i. Better grasp on programming languages and computer science basics. ii. Prepare them on practical front. E.g.: Generic Linux usage, command line usage, Embedded systems basics, etc. iii. Improve PS application process to give students an idea of what they can expect to work-on after joining any given organization (may be feedback

Company	Experience	Year
	taken from older students can be provided to applicants). Finally, really appreciate the effort BITS has taken in terms of Practice School. I feel PS gives Students an experience of the real-world work environment. This will surely help the students in deciding on their future goals. Mentor Designation: Co-Founder Company expects students to pick up latest Java related-technologies in as much less time as possible. Company provides guidance and support the same. Fast-paced work is expected out of the students. Immense learning opportunity for budding engineers. Faculty Comments: Expectations from industry: Owned and run by an ex-Bitsian, good company with immense learning opportunities in a small setup. Student	
Nvidia Graphics - Software, Hyderabad	Added signing support, package support, build support for mb1-t18x, mb1-t19x chips which helps in improving productivity of products. Tools used (Development tools - H/w, S/w): Git, flashing boards, harness, Makefiles Objectives of the project: To add signing support, package support, build support for mb1-t18x, mb1t19x chips. To add sanity support for GVS, and add ORB automation. Outcomes of the project: Task done: 1. Added package support for mb1 to build all variants. 2. Integrated signing support with GVS 3. Code migration of t19x code with git history 4. Add sanity support for GVS 5. ORB automation 6. Adding signing support for t19x 7. Add scripts for building and dev-signing t19x MB1 binary. Major Learning Outcomes: I have learnt about Makefiles, bash script, git, harness, boards, flashing, python, operating system and computer architecture Brief Description of working environment, expectations from the company: Working environment is very good learnt a lot from my internship. Academic courses relevant to the project: operating system, computer architecture, microprocessor	2017- 18- sem1
Nvidia Graphics - Software, Hyderabad	Fix Bugs & Coverity issues of WiFi, Ethernet, Bluetooth kernel Drivers. Upgrade WiFi, Ethernet, Bluetooth Kernel drivers from previous kernels. Create Python test scripts for automated testing of NVIDIA devices. Tools used (Development tools - H/w, S/w): Python, Coverity, Syzkaller, Docker Objectives of the project: To stress test Nvidia devices in different conditions. Outcomes of the project: Quality of the respective driver of the device. Major Learning Outcomes: Python scripting, Linux Kernel, Advanced C, Automated testing. Brief Description of working environment, expectations from the company: Company expects prior knowledge in C and Object oriented programming. rest of all can be learnt here. Academic courses relevant to the project: OS, OOPS, C programming.	2017- 18- sem1
Nvidia Graphics - Software, Hyderabad	Tegra is a System-On-Chip (SOC) series developed mainly for mobile devices such as smartphones, personal digital assistants, and mobile Internet devices. It's basic components include an ARM architecture based central processing unit (CPU), graphic processing unit (GPU), and memory controller. The project aims to resolve coverity issues in the existing code tree regarding dev-kernel team. In addition, the project also aims to find out the code coverage of the existing files and ways to increase the code coverage. Tools used (Development tools - H/w, S/w): C, GCOV Objectives of the project: Fix coverity issues and increase code coverage Outcomes of the project: Fixed all coverity issues and added more tests to increase code coverage. Major Learning Outcomes: In-depth understanding of drivers and improved coding skills. Brief Description of working environment, expectations from the company: My knowledge base has been improved to very good extent all because of the training I got here. The concepts I got to learn here are completely new and I could successfully work on the same all through my internship with a whole support from my team mates. My work experience with Nvidia Graphics, Hyderabad undoubtedly gave me a pretty good chance to develop my skill set which helps me to fit into industry and also gave me a clear idea on my interests. Academic courses relevant to the project: C-programming, Operating systems.	2017- 18- sem1
Nvidia Graphics - Software, Hyderabad	My work is maily related to enhancing storage drivers at Nvidia, enabling new features and fixing existing bugs Tools used (Development tools - H/w, S/w): Coverity, Git Objectives of the project: To enhance the drivers by enabling new features Outcomes of the project: eMMC and SD card protocols, git software Major Learning Outcomes: eMMC and SD card protocols, git software Brief Description of working environment, expectations from the company: Environment was friendly and very supportive. They expect us to be efficient in C programming and with basic linux commands Academic courses relevant to the project: C programming, Computer Architecture. Student	2017- 18- sem1
Nvidia Graphics -Software , Bangalore	Development, Testing and Documentation of 'CPU Clock Attribute Verification' and 'CPU Core Usage Statistics' tools using python programming language. Boot KPI data collection and analysis. Boot KPI optimization using experimental C/C++ code patches on source code. Tool used (Development tools - H/w, S/w): Python (Modules: logging, pandas, matplotlib, OS etc), C, C++, Shell Scripting, Excel, Linux, Nvidia Soc Boards, phidget and other peripherals. Objectives of the project: Development, Testing and Documentation of python tools for 'CPU Clock Attribute Verification' and 'CPU Core Usage Statistics'. Boot KPI data collection and analysis. Boot KPI Optimization. Major Learning Outcomes: Operating Systems, Python, Linux. Details of Papers/patents: Brief Description of working environment, expectations from the company: Amazing work environment and ethic. Great mentor-ship and inclusion experience. Great interaction and learning opportunities. Academic courses relevant to the project: Operating system, Computer Programming, Object Oriented Programming.	2019- 20- sem1

Company	Experience	Year
Nvidia Graphics -Software , Bangalore	I was expected to carry out profiling of various software tools used by Nvidia for testing of Tegra chiip which would enable them in increasing their market share and develop confidence in the tool produced. Tool used (Development tools - H/w, S/w): Vecorcast, Squore Objectives of the project: Profiling Of Software Tools Major Learning Outcomes: Basic C language, shell scripting, Workings of softwaresVecorcast, Squore Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is great at Nvidia. Academic courses relevant to the project: C programming, OS	2019 <sup>.</sup> 20- sem1
Nvidia Graphics -Software , Bangalore	The work mostly involved fixing violations of coding guidelines in embedded Automotive software. It involved scripting, C programming and using Static Analysis tools. Tool used (Development tools - H/w, S/w): C programming language, Linux shell scripting, Static Analysis tool Objectives of the project: To conduct Static Analysis of the functional safety of automotive software Major Learning Outcomes: C programming basics, Linux scripting, operating systems Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is good, with flexible working hours, subsidised breakfast, lunch and snacks, transport, etc provided. Work isn't very hectic, with team members willing to help interns in any way necessary. Academic courses relevant to the project: C programming, OS, Data Structures, Shell scripting Student	2019 20- sem1
Nvidia Graphics – Software, Bangalore	I have written bash shell scripts to automate and catch regressions in existing NvMedia test-app. These scripts would sync, build and flash the Tree daily and run different test-apps. Developed a RAW consumer test-app for single process, cross-process, cross-partition. Surface Refactoring for jpeg, display, vpi, dla, pvi modules. Various bug fixes in EGLStream and Surface. Tool used (Development tools - H/w, S/w): Git, GDB Objectives of the project: VALIDATION/FEATURE ENHANCEMENTS OF EGL-STREAM AND SURFACE REFACTORING Major Learning Outcomes: Shell Scripting, C, OS, EGLStreams Academic courses relevant to the project: C-Programming, Operating Sytems Name: Shubham Malpani (2014B2A80778H)	2018 19- sem1
Nvidia Graphics – Software, Bangalore	Initial phase of the project involved building yocto based image on ubuntu:18.04 using docker container and also optimization of libraries and binaries of NVIDIA for this build. Later, part after MidSemester involved updating Qt framework, modifying build output in GVS sanity from ubuntu to yocto and taking up initial source code structure analysis of a NVIDIA QNX system-software component identified for PLC coverage. Tool used (Development tools - H/w, S/w): Yocto, Docker, Git, Perforce, Source-trail, C, OS Objectives of the project: Objective of the project was to get familiarized with various tools like docker, perforce, git, Source-trail and Yocto. and to work on optimizing binary directory of NVIDIA's repository which are parsed to yocto build system through recipes and also to analyze the source code of safety critical QNX BSP safety component identitfied for NVIDIA's PLC (Product Life Cycle) coverage. Major Learning Outcomes: Learnt about the Yocto's build process, Linux Shell scripting and also understanding embedded C programs and debugging them. Brief Description of working environment, expectations from the company: The working environment is flexible and friendly, so we can work at our on time as long as we meet deadlines. The company expects dedication towards working, retrospecting and improving ourselves, handling priority work when required. Academic courses relevant to the project: Embedded Systems, Operating System, OOPS, C Programming Name: Shikhar Shiromani	2018 19- sem1
Nvidia Graphics – Software, Bangalore	Worked on development of a fully automated test software framework for AUTOSAR based MCU on Nvidia's DRIVE Development Platform. Also built a continuous integration (CI) infrastructure for the same using Jenkins. Work majorly involved writing test cases and algorithms for testing the basic functionalities of the MCU. It also involved scripting in various languages for automating the process. Tool used (Development tools - H/w, S/w): Nvidia's DRIVE Platform, CANoe, CAPL Scripting, Python Scripting, C Programming, Git, Perforce, Nvidia specific tools Objectives of the project: To develop a fully automated test system for AUTOSAR based MCU Major Learning Outcomes: Learnt about AUTOSAR Architecture, Jenkins, Python Scripting, CAPL Scripting, Debuggers Details of Papers/patents: Submitted the project abstract for NTech India Conference 2018 Brief Description of working environment, expectations from the company: NVIDIA has a very supportive working environment wherein everyone has been very helpful whenever I approached them. We, as interns, were treated no differently than full time employees in terms of work as well as the way in which the team proceeds. I extremely enjoyed working on the project that was assigned to me. I learnt a lot during the course of the internship both on the software and hardware fronts. Also got to know about the software development process and life cycle here. It is an amazing place to learn and start your career as the projects are challengine but at the same time there is no spoonfeeding. Academic courses relevant to the project: C Programming, Operating Systems, DSA Pune	2018 19- sem1

Company	Experience	Year
Nvidia Graphics-Software , Hyderabad	Worked with the kernel team for upgrading storage device drivers. Adding test script for checking performance regressions targeted to eMMC module. Solving UFS driver feature and functionality bugs. Tool used (Development tools - H/w, S/w): Git, flashing boards, coverity, gcov, Kasan etc Objectives of the project: Adding test to sanity targeted to benchmark storage performances. Major Learning Outcomes: 1. Insight into development workflow for Nvidia products. 2. Learning about device drivers, kernel, operating systems etc. 3. Understanding of hardware-software interaction of embedded product line of Nvidia. Brief Description of working environment, expectations from the company: Work environment is good, employees are cooperative and helpful. Innovation is encouraged and supported. Interns are expected to know basics of C programming, object oriented programming and operating systems. Rest of all is learned while working. I would encourage everyone to be in constant communication with your manager/ mentor to make the most out of your internship. Don't miss this opportunity to get your perceptions correct from the best people in the industry. Academic courses relevant to the project: C programming, Operating systems, Computer architecture, OOP	2018- 19- sem1
Nvidia Graphics, Pune	Nvidia has been working on GeForce Experience, an app designed for optimising the gaming experience for gamers worldwide using Nvidia GPUs. I was in the developer team. I worked on various features of the app, most important being gamestream. The gamestream feature allows you to play games on a shield device anywhere while the actual rendering of the game is done on a stationary PC. The work included firstly developing the front-end part of the app and later on working on the backend to integrate with the GPUs in the system. The app also allows you to record in-game videos, take high quality images and also provides options for the best in-game settings for best overall experience. Tool used (Development tools - H/w, S/w): Angular Framework, Typescript, Git, Gerrit code review system Objectives of the project: To work on improving and optimising the existing GeForce Experience and also work on adding new proposed features Major Learning Outcomes: Understanding gaming ecosystem, front-end, backend, integration, writing structured code, teamwork Brief Description of working environment, expectations from the company: Nvidia offers the best work environment with flexibility in working timings, free transportation, free meals and coffee all throughout the day. The workplace is ideal with everyone having a desk to work on and no one has a dedicated room, even the managers. You can freely interact with anyone and get help whenever you're stuck. The team meetings offer a lot of knowledge to you as they are very descriptive. When you join as an intern, you'll be given a mentor that'll prove to be very helpful in times of need. The work environment exceeded my expectations. Academic courses relevant to the project: Object Oriented Programming. Data Structures and Algorithms.	2018- 19- sem1
Nvidia Hardware, Bangalore	I worked on Formal Verification during my Internship. I had to formally verify some modules using system verilog assertions and find bugs if any. Tool used (Development tools - H/w, S/w): JasperGold Objectives of the project: My main objective was to do formal verification of RTL modules and find bugs if any. Major Learning Outcomes: Formal Verification, System Verilog, Debugging skills, JasperGold Brief Description of working environment, expectations from the company: Company culture is very motivating and at the same time pretty flexible. All the employees are very supportive and helpful. Academic courses relevant to the project: Digital Design, Analog digital VLSI Design, Verilog Name: Pulkit Agrawal (2015A8PS0523G)	2018- 19- sem1
Nvidia Hardware, Bangalore	The objective of this project is to find the input pin mismatches and correct them so as to make sure that the pins are connected to same nets. If the connections are not as per the old build then the logic will change and the whole design will build to something else, hence, it is very important that connections are correctly made. After the pin mistaches are finished, instancing of the macros in the SOC is supposed to be done. But because of the migration to NVQ, there has been a complete reshuffling of elements and macros. There has been regrouping of elements and the location of these elements have been completely changed. Hence these locations or what is called in this case the Hierarchies need to be updated. There are various checker which are made in order to test the working of SOC. These checker are not synthesized but are very important for the verification of the SOC. There are various checker which are created. These checker need to connect to the SOC. There are various input pins in these checkers which are connected to the SOC. Now the hierarchies of these inputs pins have changed, hence the checkers also need to be updated with the new hierarchy. Tool used (Development tools - H/w, S/w): Python, Perl Objectives of the project: SOC Port Cleanup Major Learning Outcomes: SOC Design Flow, Clocking Schemes in SOC Brief Description of working environment, expectations from the company: Amazing work environment, very easy going people and managers. Academic courses relevant to the project: Digital Design Mentor Designation: Senior Architect, Infrastructure Comments: We look for interns who are dedicated, inquisitive, flexible and interested in learning. We are very happy with students' performance and contributions.	2018- 19- sem1

Company	Experience	Year
Nvidia Software, Bangalore	The project involved exporing SOME/IP and its C++ implementation vsomeip. The next phase involved building and running vsomeip apps across two Ubuntu machines. The final goal was to build and run vsomeip apps across Tegras on DPX2 board, this was initially done using Yocto's buildsystem and then using Tmake (NVIDIA's own buildsystem). Tool used (Development tools - H/w, S/w): C++, Linux Objectives of the project: To build the vsomeip apps Major Learning Outcomes: Learnt about various Buildsystems Brief Description of working environment, expectations from the company: Working environment is good. Many of the employees are friendly and helpful. Regular interactions with mentor and manager were helpful for completing work on work. Work to be allotted to interns should have been decided before hand so that the time would have been utilized more judiciously. Academic courses relevant to the project: Object Oriented Programming, Computer Programming in C Name: Suraj Sarab (2015A3PS0375H)	2018 19- sem1
Nvidia Software, Bangalore	I worked in the development of examples for relevant use-cases in an effort to integrate GLSL in the Compute Trace Generation Framework. This helps the architects who use the framework to generate compute traces to test upcoming features in the next generation of chips utilize the functionalities that GLSL adds to the platform. It also allows the team to identify the features that can be supported by the framework. My work also included development, feature additions and bug-fixes of the tools owned by the team (Trace Tools) that deal with disassembling, modification and debugging of traces. I also worked on developing an UI based workflow for trace generation of scenario based tests so as to enable the architects to maintain their focus on the feature that has to be tested and not getting caught up in the framework intricacies. It also provides a visual representation of the trace generation workflow and enables the generation of complex test-cases with relative ease. Tool used (Development tools - H/w, S/w): Visual Studio, Atom, Perforce, Internal Tools Objectives of the project: Trace Tools development Major Learning Outcomes: GPU Architecture, OS and Computer Architecture concepts, Programming paradigms, Web Development Brief Description of working environment, expectations from the company: The work environment is great at enabling peer to peer learning at every opportunity possible. The flexible working hours, Resources to learn, equipment available and the general attitude of the team-mates and senior executives inspire employees to learn and grow in their job and also work as a team. Company expects and enables it's employees to not only deliver results according to the plan, but also make valuable suggestions/additions to the resources or workstyle. The demarcation of time into sizable chunks and self evaluation of your performance in that chunk to work better as an individual and also a team is a notable quality that I observed here. Academic courses relevant to the project: Operating Systems, Compute	2018- 19- sem1
Nvidia Software, Bangalore	Fixing MISRA C violations, taking KPI measurements, developing test application for mixer and reduction of Code Complexity. Tool used (Development tools - H/w, S/w): S/w. Git, Jira, Understand are the tools used. Objectives of the project: PLC certification of automation code. Academic courses relevant to the project: C Programming Name: TEJESH ANDHAVARAPU (2015AAPS0264H)	2018- 19- sem1
Nvidia Software, Bangalore	Developing SSTI for QNX. Performance Tests are to be automated in SSTI. Coming up with a generalized approach for adding System Software Tests in SSTI. Developing a json parser script for running the host and target side commands respectively. Addition of update sample test and golden register test using the json parser script. Adding TOT support in SSTI. Enabling VectorCast in SSTI to generate coverage reports for all the QNX modules Tool used (Development tools - H/w, S/w): Jenkins, Docker, Vectorcast Objectives of the project: The project involves adding different tests to the testing infrastructure SSTI. Major Learning Outcomes: Bash Scripting, Python Brief Description of working environment, expectations from the company: Great working place and environment. All the employees are friendly and approachable. It is a amazing place with all the comforts you would expect and with constant support from the team members. The work timings are very good and quite flexible. There is scope to learn to learn a lot of new things and gain a variety of skills. Academic courses relevant to the project: C Programming, Operating Systems Name: Sreehari K (2015A3PS0282P)	2018- 19- sem1

Experience Year Company I was allotted DGX System Management team. Nvidia DGX is a world's first super computer which specialize in using GPGPU(General Purpose GPU) to accelerate deep learning applications. DGX System Management(NVSM) contains 3 pillars namely NVSM-APIS (A server which collects and structures system hardware information from DGX and provides redfishlike APIS for clients to access), NVSM-DSHM (DGX System Health Monitor, Queries these APIS to define system health, logs error (if any) alerts to DB and notifies user), and NVSM-CLI (A custom-made command line interface to access the DB, to define monitoring policy). The integration testing between these pillars were automated through a test suite for Continuous Integration. Errors were simulated in NVSM-APIS and responses of DSHM and CLI were verified. Test suite uses python unittest module and covered all use cases that ensures sanity across the repositories. The suite was integrated to git through tools Jenkins, docker and vagrant and will get triggered upon every merge request. The suite contains as many as 60 test cases and takes less than 5 minutes to run. Logging, code coverage and HTML reporting were incorporated for better debugging. Coverage hit high value of 90%. Also, a mock server that mimicked the NVSM-APIS that is running in a DGX was developed. This was not a part of the project but was used by the team for development. Tool used (Development tools - H/w, S/w): Jenkins, Docker, Vagrant, Python, Shell, Golang Objectives of the project: 2018-Nvidia Software, Bangalore To completely automate the integration testing of DGX System Management, To carry of the continuous 19integration after ensuring sanity across repositories, To assist the developer in debugging through logs sem1 and reporting, To measure the robustness of the code by calculating the coverage of daemons. Major Learning Outcomes: 1. Concepts of continuous integration and automation. 2. Python and shell scripting. Especially python modules like unittest, requests, logging, pymongo, os and sys. 3. Tools like jenkins, docker and vagrant. 4. Brief overview of Golang 5. Importance of intra-team and inter-team communication, documentation and soft skills. Brief Description of working environment, expectations from the company: The atmosphere in NVIDIA is very friendly and extremely conductive for knowledge transfer. The team was really supportive in terms of ramp-up and provided constant constructive feedback as the work progressed. They spent time to help, whenever I confronted a problem. The tech talks organised within the team helped to be up to date with the latest technology. From the HR side also, the feedback from interns was taken regularly and issues were handled proactively. The company (from the perspective of my team) expect one to adhere to the milestones, to be a quick learner, to be polite, confident and clear while interacting with the team. In every sense, I was treated equal to an employee within the team, so was expected to bear equal responsibility. Academic courses relevant to the project: Object Oriented Programming, Operating Systems. Name: Prakhar Gupta (2014B2A30906H) As a part of the dynamic and customer centric TSE System Software Team, I have been actively involved in following projects in past 4 months: 1) Power-fail safe update: Tested and validated the complete power fail safe feature for Nvidia's automotive middleware, Drive CX2 platform. 2) Regression for partitions updates: Optimized the S/W update time for customer platform, NTG7 Parker by reducing the erase time for QSPI and EMMC partitions by ~75%. 3) Boot KPI Optimization: Currently driving the entire project for 2018optimizing the Boot Time on customer's automotive platforms, Boden NTG7 Parker and Xavier, by identifying the Key Performance Indicators and reducing the inital boot time by ~50% to meet the 19-Nvidia Software, Bangalore customer targets. Tool used (Development tools - H/w, S/w) : H/W : Nvidia DCX2/DDPX S/W : Linux, Git, sem1 Update Sample Toolchain, C concepts Objectives of the project: Primary objective of the projects I have been directly or indirectly involved was to optimize the time consumption related to current customer deliverables. Major Learning Outcomes: Thorough learning about BootLoader and Bootloading proces, fundamentals of C, Git and Linux proficiency Academic courses relevant to the project: Operation Systems, Computer Architecture, C programming Name: V SAI NIHKIL (2015A3PS0312H) Worked on making the NVGPU driver code MISRAC coding standard compliant. Tool used (Development tools - H/w, S/w): Coverity Objectives of the project: To make the NVGPU driver code MISRAC Compliant 2018-Major Learning Outcomes: MISRAC coding standard rules and directives and its importance Brief Nvidia Software, Bangalore 19-Description of working environment, expectations from the company: Work environment was very friendly sem1 and all the team members were supportive and encouraged any doubts in the project. Academic courses relevant to the project: C programming Name: Ch. Srujana (2015AAPS0273H) Developed a C implementation of Configuration Database parser. Improvised the configuration files to JSON and developed a complete parser and established streaming, also worked on improvising scripts for automizing streaming. Tool used (Development tools - H/w, S/w): C, python - SW tools Objectives of the 2018project: To develop a Cimplementation of Configuration Database parser Major Learning Outcomes: 19-Nvidia Software, Bangalore Learnt python, got better at C programming, learnt other soft skills like team work and communication sem1 skills Brief Description of working environment, expectations from the company: Working environment is very encouraging to help us come with our own ideas and implement them. Guided properly to achieve the tasks assigned. Academic courses relevant to the project: C, OS

Year

Experience

Company

i was assigned a work related to front end development so initially i was learnt all new technologies related my project like reactjs, HTML, SASS and java script and i was given work on Search Engine Optimization (SEO ) and web performance of a web application and integrating new API's for the Product Description Page (PDP) and Product Listing Page (PLP) page of a e commerce web site. so I was learnt and done deep research about SEO using SEO tools and web performance of a e commerce web site using web performance optimization tools and i was submitted report to the manager and he asked to fix some of the issues i identified during research then i picked some tasks related to SEO and Web Optimization and I was fixed those issues which made web site faster than before and increased organic traffic of the website. after that i have assigned API Integration for PDP and PLP page of a E-commerce web site so i need do replace third party API with in house API for those two web pages so i was initially done for PDP. I was written transformer for in house API which make the response of in house API compatible with components on e-commerce web site which are previously consuming third party API data.and also removed many extra API calls previously calling for the data on the PDP page as all the aggregated data of the PDP page are getting from new in house API and removed unnecessary code from the code base which reduced the file size and redundant code from code base and make code base clean and clear and written code with Es lint standards with proper jsdoc comments .done same thing for PLP API.as result it 2018-NYKAA E-RETAIL, Gurgaon decreased the load time of a web site which makes web site faster and which will ultimately increase the 19-SEO rankings Tool used (Development tools - H/w, S/w): Reactjs Library for Components development on sem1 web site and SASS for styling and MOZ pro SEO tools to learn and research on SEO of e-commerce web site and google web page speed insights and google lighthouse test tools for web performance optimizaion and redux for project architecture and VS code editor and git for repository and code base management and github for team collaboration Objectives of the project: making website faster using latest technologies and methods and increasing SEO ranking and decreasing load time using web optimization techniques which are have huge impact on revenue of a e commerce web site Major Learning Outcomes: Learnt Search Engine Optimization and Web performance Optmization and learnt developing Components of a web application using Reactjs and javascript and learnt replacing third party API with in house API Brief Description of working environment, expectations from the company: my PS2 company is startup and i have very huge scope for learning many things and also interacting with higher hierarchy people in the organization. and all the people in the organization are very friendly and open minded and they clarify doubts immediately when ever i ask and i have given sufficient work for my entire period of PS2 and A lot of different interesting projects are going on in Nykaa which highlights the amount of opportunities to learn. Academic courses relevant to the project: OOP, DSA, CN, DBMS Name: ADABALA SANDEEP (2015A7PS0054P) RMS(Return Management System) is a Microservice associated with Nykaa e-commerce. It is a multi module maven spring boot project built using maven. First project is to write unit test cases of service classes associated with RMS. Second is migration of RMS from Spring Boot 1.4.3 to Spring Boot 2.0. RMS is migrated from 1.4.3 to 1.5. Then, from 1.5 to 2.0.6. Third is to improve the performance of RMS from logging perspective. Earlier, application logging is done asynchronously using log4j2 framework with async appenders. These are replaced with Async loggers. Vault is another micro service associated with the site and application. Final project is to write unit tests of vault's service methods. Tool used (Development 2018-NYKAA E-RETAIL, Gurgaon tools - H/w, S/w): Intellij IDEA Objectives of the project: Unit Testing, Logging, Spring Boot Migration 19-Major Learning Outcomes: Unit Testing using JUnit and Mockito MicroServices using Spring Boot sem1 Dependency management Details of Papers/patents: Presentation of office work is made to the team and release notes and documentations are shared with our group. Brief Description of working environment, expectations from the company: Everyone around in the company is approachable and always willing to help despite being a small group of 80 or so and their hectic work. Documentation of work, release notes, presentation of projects etc. are expected. Academic courses relevant to the project: CS F213 Object Oriented Programming Developed the tender crawler framework which provides data for company's newly launched Bid-Assist app and website. Tools used (Development tools - H/w, S/w): Java, Spring Boot, Maven, Redis, S3, GitHub Objectives of the project: Back end development of tender crawler framework for Bid Assist Outcomes of 2017the project: Crawls tender on daily basis fetching approx 7000 tenders daily. Major Learning Outcomes: Of Business.com, Gurgaon 18-Learnt about different technologies like Java, Spring Boot, Maven, Redis, GitHub, S3 Brief Description of sem1 working environment, expectations from the company: Mentors were good and will help you out in almost every difficulty that you face. Great learning curve in this startup but company expects you to perform and deliver on time from day one. Academic courses relevant to the project: OOP

Company	Experience	Year
Of Business.com, Gurgaon	Front-End Development Tools used (Development tools - H/w, S/w): JavaScript, ReactJS Objectives of the project: Developing Front-End CRM Outcomes of the project: Developed Front-end of CRM Major Learning Outcomes: Javascript and UI/UX Design Brief Description of working environment, expectations from the company: Comfortable and Helpful	2017 18- sem
Of Business.com, Gurgaon	The project allotted to me was a live project, now released and publicly available at https://bidassist.comDuring PS-II, my contributions into the project were largely on the back-end part. I worked on developing an efficient crawler system in Java, using Asynchronous HTTP clients and Jsoup libraries. Apart from writing parser codes for 67+ govt tender domains, fetching 7000+ fresh tenders every day, I also worked on designing aspects of the core crawler framework and its optimizations.Besides, my job also included making front-end patches using Javascript React, and CSS3. Tools used (Development tools - H/w, S/w): Technologies used were primarily back-end related, including, and not limited to, Java, Spring-boot, Maven, Redis, Jsoup, Asynchronous HTTP clients and Selenium web drivers. Also GitHub was used extensively for code collaboration purposes, and the standard Javadocs for the documentation part. Objectives of the project: At OFB, the objective of this project was to develop an efficient crawler system that would fetch tender data and information from the govt. websites, and then serve as the back-end database for company's new web product BidAssist. BidAssist is a new generation state-ofthe-art Lead Management System that empowers OFB's new businesses, en route also making the company India's largest non-govt, non-profit tender aggregator. The objective was to crawl tenders in bulk, with maximum code reusability, and reach a stable target mark of 7000+ new tenders each day. The target has been duly met and the application tested thoroughly, making it virtually self-reliant and with the need of minimal maintenance. Outcomes of the project: The outcomes of the project were in accordance to the project objectives, and fall in line with the work summary as mentioned in above sections. Major Learning Outcomes: There were tremendous learning outcomes from the project in all the web development technologies as mentioned above. Besides, working on the project, we also got greater insights into the company was b	201' 18- sem
OfBusiness , Gurgaon	Majority of work was to crawl tender data from government portals, which would be shown on the company's online portal. I also worked with the product team to formulate data for a new machine learning project. Tool used (Development tools - H/w, S/w): JAVA, Redis, Excel, Spring Boot Objectives of the project: Make the company's online tender portal 'bidassist' a one stop solution to all the needs of the contractors. Major Learning Outcomes: Software Development, product development Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is pretty laid back and there is no pressure or formalities. You can talk freely with your team and the CTO. Everyone in the company is serious about providing the best experience to the customers and expect the same from you. Odd Saturdays are working. Academic courses relevant to the project: OOP, DSA Student	201 20- sem

Company Experience Year

Practice School is the perfect opportunity to enable a smooth transition from academy to industry. My experience has been a great learning experience. Opera Solutions is a cutting edge technology firm dealing with Data Analytics and Machine Learning Applications to diverse business domains like healthcare, spend intelligence, banking, aviation etc. The company represents the confluence of technology and services in an intensely competitive yet healthy and nurturing environment. The experience became particularly rich because of a flat hierarchical structure, enjoyable work environment, supportive management and motivational peers. Even though the company is well established in the niche area of big data analytics and has a wide global imprint with a talented pool of employees, it continues to have a start up like culture encouraging independent entrepreneurial thought without compromising on accountability. The particular project on which I was staffed, involved backend development work, caching technology, database operations, proof of concepts for new solutions and client interactions. I worked intensively with technologies like Python, R, MySQL, Redis, Spring MVC, MongoDB etc. This experience has indeed helped me in developing an in depth understanding of the corporate world and one cannot ask for a better start to one's career. Gratitude to BITS Pilani and Opera Solutions for providing such wonderful mentors and giving me this opportunity. Darshika Khandelwal (2012C6PS574P) Discipline: Information Systems The experience in Opera Solutions is one that has proved to be more practical than anything else taught academically. It has been brilliantly enlightening in the sense that any student who wishes to experience the real application of his/her learning during his/her career can do that on the Practice School 2. It can be specially helpful to those who wish to decide on a career path by getting actual experience. During my internship period at Opera, I learnt a whole lot of stuff including major technologies, communication skills and management skills. The technologies include R, SAS, Spring Framework, Flex, major modelling techniques etc., which are not usually taught in the academic syllabus. There is a difference in writing simple code and creating useful client based services by coding and this one difference was the highlight of my stay at Opera. I got to interact with the client, work according to his needs, handle real time issues that the client faces, manage the work by interacting with the team members, peer program, brainstorm on which technology to use to result in optimum efficiency, integrate the pieces of code to form something tangible and so on. All this clearly had a lot for me to take back. It has been a unique experience and clearly a brilliant initiative by BITS. It helped me broaden my knowledge base in terms of both technologies and learning to apply at a personal level.I believe my major

2015-16sem1

Opera Solutions, Noida

Oracle Financial Services Software Ltd. ( OFSS) , Pune completely efficient.

Initially I was given constant POCs to get experience with the technologies used in the development of the product OB Collections. After that I was given several bugs to fix during final testing of the release and was asked to make a map of the services used from UI to Business Services. Finally, I was involved in development of enhancements that are to be incorporated in the coming release. Tools used (Development tools - H/w, S/w): JAVA, Oracle ADF on IDEs Eclipse and JDeveloper Objectives of the project: -Bug Fixing To Make A map of the services used from UI to Business Services Enhancements that are to be incorporated in the coming release Outcomes of the project: The given objectives were achieved Major Learning Outcomes: Learned about the MVC architecture, how to do UI development on Oracle ADF and acquainted with Web Services. Brief Description of working environment, expectations from the company:The working environment was very healthy. The seniors contantly encouraged us to ask questions and learn new things, we were to remain updated with the newest arrivals in technologies. I also got a view at how the development of a large-scale enterprise product happens.

achievement in Opera Solutions was to reduce the time taken for a client critical process to run by 25%. It had an impact on the client as well as my manager. I managed to learn a completely new technology(R), understand a complex piece of code written in it and make sense out of it and later optimize it to be the

2016-17sem1

Company	Experience	Year
Oracle Financial Services Software Ltd. ( OFSS) , Pune	For the first half, I worked on the Module Dependency Parser. I had to do the bug fixing and had to design a new TaskFlow parser. Technological knowledge required is basically JAVA only. On the second half of the PS I worked on the JMS (JAVA Messaging Service). I had to automate the transfer of messages from Backup queue to normal message queue. For this I learned how to configure JMS. Overall It was a great experience and my learning curve grows exponentially. Tools used (Development tools - H/w, S/w): Eclipse J2EE, Oracle JAVA Developer, Oracle WebLogic Server Objectives of the project: Bug fixing in the Module Dependency Parser and Designing the new TaskFlow Parser. After that worked on the JAVA Messaging Service. Outcomes of the project: Fixed the Module Dependency Parser and integrated the new TaskFlow Parser in the existing parser. Automated the process of message transfer from Backup queue to message queue. Major Learning Outcomes: Learned to work on such a large-scale project. Learned to parse XML/HTML files. Learned the asynchronous type of messaging in JAVA Messaging Service. Brief Description of working environment, expectations from the company:During the course of Practice school, I got to work in a project which requires a lot of coordination from other team members. My team members helped me a lot in these issues. I got to know how a real time working environment looks like in a multinational company. Work culture is awesome here. Work timings are flexible here and moreover your peers are always ready to help you if you are having any problem. Overall this PS was a great learning opportunity for me where I learnt the industry standards for working and otherwise. Student	2016- 17- sem1
Oracle Financial Services Software Ltd. (OFSS),	Developed applications for metadata report and Connector definitions Tools used (Development tools - H/w, S/w): KO, d3, require, OJET, JQUERY, JAVAscript, JAVA servlets, HTML5, JQUERY UI, AJAX Objectives of the project: -Develop and application for meta data report and connector definition Outcomes of the project: First project was completed and second is almost complete Major Learning Outcomes: Code Optimization, Code development in modules, New technologies leart Brief Description of working environment, expectations from the company: The work environment was good. The mentor was very helpful in developing my skills and helped me in finding a good approach to solve the problems and tackle with the bugs.	2016- 17- sem1
Oracle Financial Services Software Ltd. (OFSS),	Client and Server side scripting. Tools used (Development tools - H/w, S/w): Eclipse, Winscp, SVN, Text editor Objectives of the project: HTML5 Conversion Outcomes of the project: Web pages have been made multi-browser compatible Major Learning Outcomes: Web Development Brief Description of working environment, expectations from the company: Very chilled out work environment, you will be given work only if you show interest. Good place to learn as you can work as much as a full-time employee if you want to. Easy PPO.	2016- 17- sem1
Oracle Financial Services Software Ltd. (OFSS),	Designed and developed learning models for various business needs. Tools used (Development tools - H/w, S/w): R Studio, R, WinSCP, SQL Developer etc. Objectives of the project: -Develop more efficient learning models Outcomes of the project: Random Forest models for various business insights Details of papers/patents:White Paper Brief Description of working environment, expectations from the company:Work environment was good. My manager was very helpful in guiding and developing my skills and helped me in improving my time management skills and functional knowledge. Mumbai Faculty Software Tools Used: Hadoop, Maven, GitHub, Eclipse, Putty, Locus, JSON, Postman Soft Skills: Ability to work in team environment, attention to details, adherence to timelines, good communication skills, promptness and timeliness Students can prepare better by building basic concepts in topics such as Data Mining, Android Programming, DBMS (SQL Query Designing), JAVA Programming Industry expect PS2 interns to have a learning attitude, and willingness to work hard. While industry people understand that students will not know everything beforehand, but expect students to learn quickly. Industry also expects sincerity and discipline from students. Student	2016- 17- sem1
Oracle Financial Services Software Ltd. (OFSS),	Web application development, Eclipse plug-in development and GUI development Tools used (Development tools - H/w, S/w): JAVA, Eclipse SWT, Rest API, Oracle BI publisher Objectives of the project:  -To create a report generation framework using Rest web service, and to make an eclipse plug-in for file upload template generation Outcomes of the project: Eclipse Plug-in created and is forwarded to officials for a test run. The report framework is ready to be aprt of the latest release Major Learning Outcomes: PL-SQL, Rest API, Oracle BI publisher Brief Description of working environment, expectations from the company: The company has an air of professionalism surrounding the working environment and the all the employees are hard working, helpful and welcoming.	2016- 17- sem1
Oracle Financial Services Software Ltd. (OFSS),	Repository/Dashboard creation, BI components onto ADF and repository merging Tools used (Development tools - H/w, S/w): OBIEE tools Objectives of the project: To merge repositories of two modules Outcomes of the project: Repositories were merged Major Learning Outcomes: Error debugging and database handling Brief Description of working environment, expectations from the company:Working environment in OFSS is employee-friendly. Flexible work hours are the norm. Goal-oriented company that is fit to serve the current banking systems.	2016- 17- sem1

Company	Experience	Year
Oracle Financial Services Software Ltd. (OFSS),	In the first part of my project, I made an extension which saves quite a lot of time. In general, if you make changes on the task flow, to see its visual appearance you need to first deploy the task flow onto the server. This process takes time. With the help of the extension you don't need to deploy the file on the server, changes made will directly make changes in either the xml or xsl files, result of which can be seen by running xml file on the browser. In the second part, I worked on the OBP TV. I edited php scripts to optimize searches to bring out suitable list of pages relevant to the search. In the final part, I worked on OBP UI Development. I developed ADF task flows. With the help of wconfs, I was able to generate projects. Files like jsf, handler, pagedef, taskflowdef, helper, utils, etc. were suitably coded in jdeveloper and eclipse to get the required UI display and HOST calls from the database. Tools used (Development tools - H/w, S/w): S/w: Jdeveloper, Eclipse Objectives of the project: -Jdeveloper Plug-in for ADF task flow and UI Product Development for Credit Monitoring Outcomes of the project: This extension saves quite a lot of time. In general if you make changes on the task flow, to see its visual appearance you need to first deploy the task flow onto the server. This process takes time. With the help of the extension you dont need to deploy the file on the server, changes made will directly make changes in either the xml or xsl files, result of which can be seen by running xml file on the browser Credit Monitoring Dashboard product will enable bank users to monitor status of their accounts using parameters such as Facilities, Collaterals, Conditions & Covenants and Insurance. It will also enable the user to modify the information (if required) and update the same. Major Learning Outcomes: JDeveloper SDK extensions, ADF Taskflows Brief Description of working environment, expectations from the company: Very satisfied with the corporate experience and the project that OFSS, Mumbai has provid	2016- 17- sem1
Oracle India Private Limited, Bangalore	My project is to implement FIDO U2F Authentication in Oracle Access Manager (OAM). FIDO enables enterprises and service providers to deploy strong authentication solutions that reduces reliance on passwords. I wrote a Java script API that enables U2F Authentication. Then I wrote a java source code to register and authenticate my U2F device. Then I wrote a Authentication plugin to integrate my code in OAM(specific to Oracle). Tool used (Development tools - H/w, S/w): Eclipse, J Developer, Intellij, OAM, Java script, Java Objectives of the project: The objective of this project is to provide strong Authentication solutions to reduce reliance on passwords so that the accounts cannot be hacked. Major Learning Outcomes: I learnt Java script language for this project. I also learnt how to use eclipse and other hardware tools. More than that I got to understand the work environment. Brief Description of working environment, expectations from the company: Working environment was very good. Everyone took good care of us. They gave us time to understand things. My team members helped me in many ways through these five months. Academic courses relevant to the project: Cryptography Name: Roshitha Bezawada (2015A7PS0059H)	2018- 19- sem1
Oracle India Private Limited, Bangalore	Developing REST APIs for Oracle clusterware events using internal oracle libraries Tool used (Development tools - H/w, S/w): Mobaexterm Objectives of the project: REST APIs creation Major Learning Outcomes: DSA - few parts, computer networks Details of Papers/patents: Paper regarding my project at Oracle conference Page Brief Description of working environment, expectations from the company: Employee friendly company, space for new ideas in a team. Well structured guidance is given to the interns especially in my team. Academic courses relevant to the project: Computer Networks Name: Rishi Kaushik (2015A7PS0046H)	2018- 19- sem1
Oracle India Private Limited, Bangalore	I worked as part of the Platform Service of Oracle Management Cloud. The Platform Service at OMC receives data in various ways, including REST APIs. A developer of the platform team needs to understand various concepts such as EJB, JPA, ORM to efficiently maintain the APIs and remove any bugs or performance issues. Also new APIs need to be created as and when required by clients or other services. Tool used (Development tools - H/w, S/w): Enterprise Java - EJB, JPA JUnit Weblogic Server SSH Clients - Putty VNC Server/Client Oracle Database 12c SQL Developer Postman MySQL Git Objectives of the project: API Development as Part of Platform Service for OMC And Exploring Alternative to JPA Implementation for Faster Database Operations Major Learning Outcomes: I learnt about Enterprise Java and various technologies and APIs under it. I also learnt how to code, deploy and debug web applications that work with a database. Academic courses relevant to the project: CS F212 - Database Systems Name: Sagar Dasgupta (2015A7PS0108H)	2018- 19- sem1

Company	Experience	Year
Oracle India Private Limited, Bangalore	Work on side to java translation where the side file s generated from the Selenium IDE plugin of firefox 61 and I have to convert that side file into a Java executable file which can draw the webBrowser perform specific command related queries. Tool used (Development tools - H/w, S/w): Selenium IDE, Oracle Management Cloud, Scripted action tests, String template Objectives of the project: Side to Java Translation as a part of Application Performance Monitoring - Oracle Management Cloud (OMC). Major Learning Outcomes: Learnt about Selenium IDE, selenium source code and every selenium commands with their execution mechanism using firefox webdriver, String Template. Brief Description of working environment, expectations from the company: Work environment is very professional in corporate sense. The team peeps are very resourceful and helpful at the same time. I also think I really got lucky with the manager I got allotted to, as he has always been a support and very helpful during the whole course of the internship. Academic courses relevant to the project: Object Oriented Programming, Operating System, Computer Networks Name: Alekh Maheshwari (2015A7PS0097P)	2018- 19- sem1
Oracle India Private Limited, Bangalore	The objective of the project was to integrate notification support as a second factor authentication for an Oracle B2B product-'Oracle Access Manager'. This method is more convenient and intuitive than One Time Password (OTP) based two factor authentication. The project mainly required the knowledge of Oracle Access Manager plugins (Java plugins), REST API and Firebase Cloud Messaging. In Layman terms, when a user tries to access the protected resource, the resource owner receives a notification on his/her mobile (Oracle Mobile Authenticator app) which he/she could accept or deny based on the credibility of user trying to access the resource. Tool used (Development tools - H/w, S/w): Oracle Access Manager, SQL Developer, Firebase Cloud Messaging, Android Studio, Apache Tomcat server, Postman. Objectives of the project: The objective of the project was to integrate push notification support as a second factor authentication for Oracle Access Manager Major Learning Outcomes: Learned about REST endpoints, Oracle Access Manager, SQL Developer, Maven, Firebase Cloud Messaging service, Json, Jsp, Ajax, Debugging in Eclipse, Android app development, OAuth, Cryptography, Apache Tomcat servers, and most importantly software design. Brief Description of working environment, expectations from the company: Oracle has a great work culture and working environment. No dress code. No specific in-time/out-time or fixed number of working hours. Easy going people. Lesser politics. And we can directly report to the manager as interns. Pace of work is a bit slow. Academic courses relevant to the project: OOP, Cryptography Student Name: Ranajoy Roy	2018- 19- sem1
Oracle India Pvt .Ltd., Bangalore	My intention of choosing PS2 in my seventh semester was to get a first hand experience of the industry and of working in an MNC to figure out if this is what I want to do in the future. Oracle has helped me come closer to figuring this out. There were a lot of differences from life in college to life here at Oracle and it took me a while to get adjusted. I wouldn't say that one is better than the other, but both have their merits and demerits. To start with, at PS2 there is almost always an objective that we are working towards – maybe a simple bug that needs to be fixed in a hour or a big enhancement that has to be released in the next two months. There is always someone – in my case, my manager, who is taking a keen interest in what we are doing and how we are progressing. The first few weeks were filled with anxiety as everyone was new. Since my team is filled with experienced people and very few freshers, every conversation was a learning in itself. There is a lot of emphasis laid out on grooming newcomers. Even the higher line managers spend a decent amount of time talking to interns and learning about our experiences with the view of making it better for us and the company. The career advice that I have received from my mentors and manager have given me valuable insights into what my strengths are and what I should be focusing on. There are some things that can be incorporated in our academic courses - especially the disciplinary electives - as projects which require students to use the toolkits that are employed in the industry. It will be interesting to have an academic project that goes through the cycles followed in the industry. It will be interesting to have an academic project that goes through the cycles followed in the industry. It will be interesting to have an academic project that goes through the cycles followed in the industry. It will be interesting to have an academic project that goes through the cycles followed in the industry. It will be interesting to have an academic project that goes	2015- 16- sem1

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	Developed an automation framework for Oracle cloud platform. It was a wrapper around Oracle's IaaS (Infrastructure as a service) offering. It's similar to Amazon cloud formation (part of AWS). Tools used (Development tools - H/w, S/w): JAVA, Jersey, Hibernate, Eclipse Outcomes of the project: Project achieved all the specified objectives Objectives of the project: Develop a wrapper around cloud platform to simplify and automate provisioning and configuration of compute resources. Major Learning Outcomes: Learned about web development and enterprise software development in JAVA. Brief Description of working environment, expectations from the company: Work environment and project details are team specific. For me it provided a perfect mix of challenge and work-life balance. Highly recommended station!	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Develop Mobile application that answers voice or text based natural language queries about the Asset Monitoring data. The Natural Language query will be converted to SQL query and sent to the Oracle IoT cloud services and executed in it. The result of the query will be bought back to the mobile app and displayed to the user Tools used (Development tools - H/w, S/w):Android Studio, JAVA, Stanford Nip, Apache Spark, Oracle IoT cloud services Objectives of the project: Develop Mobile application that answers voice or text based natural language queries about the Asset Monitoring data. Outcomes of the project: Mobile app was created, and natural language to SQL conversion done to some extent Major Learning Outcomes: Android Development, Apache Spark, Natural Language Processing Brief Description of working environment, expectations from the company: working environment was pretty good, managers were knowledgeable, teammates were helping when needed. Oracle organised an outing and hackathon for us, it was pretty fun experience. The work given was also very interesting. I got to learn new things.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Public execution of selenium tests in Oracle cloud Tools used (Development tools - H/w, S/w):Docker, Oracle container cloud service Objectives of the project: Implementing the selenium test execution on Oracle cloud Outcomes of the project: Completion of proof of concept of a working model of selenium test execution using container cloud service Major Learning Outcomes: Developing cloud applications Brief Description of working environment, expectations from the company: Working environment was Good.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Writing an Automation JAVA code for Template and Stack Operatoins Next, I worked on product standardization and configuration. It helped me learn product design thinking and apply it to the problem at hand. It also involved a lot of testing and troubleshooting work. This PS2 experience has been an important milestone in shaping my skills as well as approach to the work culture at a startup. Tools used (Development tools - H/w, S/w):Postman Rest Client, Eclipse, Rest Assured API, JAVA, Shell Scripting Objectives of the project: Main Objective of my project is To write a JAVA code which helps to simply Import, export Templates and Stacks (Services) on to PSM (Platform on which all the PaaS services are being provided to Customers) Outcomes of the project: JAVA code for Implementing aboveoperations is completed and I even tested the working of template and stack Operations. It is Integrated into the Hudson with their already existing code and also pushed onto git. Major Learning Outcomes: Learned a Lot about PaaS (Platform as a Service). Learned how to design code such that its easily readable and flexible to implement functionalities Brief Description of working environment, expectations from the company: Overall the working environment of Oracle is really good, especially the freedom which company provides employees. Working place is quite spacious to work on.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	The internship projects involved working on different aspects of the client side stack of the Oracle Financial Services Analytical Applications. The major part of the project involved working on UI, client side JavaScript, API and RESTful web service design using JAVA. In addition, software development practices like AGILE, SCRUM and version control were a part of the daily work. Tools used (Development tools - H/w, S/w): Languages: JAVA, JavaScript, HTML5, CSS3 Software: Eclipse, SVN Objectives of the project: Enabling Multi Browser Support for OFSAA Outcomes of the project: OFSAA is now supported in all leading browsers. In addition, browser, specific quirks are handled. The Suite UI has also been update to a much sleeker design. Major Learning Outcomes: The project dealt with all aspects of handling the client side stack of OFSAA. Brief Description of working environment, expectations from the company: The R&D division in divided into several teams which handle different aspects like Application and Platform development. I was part of the Enterprise Modeling Framework team which worked on providing the platform for data modeling and creation of analytical models. As part of the team I worked on the UI for the platform, client side JavaScript to handle the different components of the platform and designed RESTful web services using JAVA and the jersey implementation of JAX-RS. In addition, I was exposed to software development patterns and practices like version control and nightly builds. The team used the AGILE software development strategy and the progress was monitored using regular SCRUM call and the JIRA tracking platform. The internship was focused on learning hence I got to interact with a lot of senior developers in order to understand the best dev strategies for work. My mentor and team members were very helpful and patient with me and helped me through the entire process.	2016- 17- sem1

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	Extend the files API with HDFS File System Provider. Migrate the Data Lens Tools from vb.net to JAVA. Our main aim was to create a wrapper around the org.apache API, so that the user only needs to use the jav a.nio.Files API for accessing and managing files in the hadoop distributed File System instead of using the apache API which requires the user to write lengthy commands to accomplish simple tasks. We, therefore integrated the apache and the Files APIs in order to auto-detect the HDFS scheme from the user and use the installed HDFSFileSystemProvider on the machine to interact with the Files API and perform the standard files operations such as reading the file data, copying, creating directories. Tools used (Development tools - H/w, S/w): JAVA, Hadoop, JAVAFX, EDQP. Objectives of the project: Extend the files API with HDFS File System Provider. Migrate the Data Lens Tools from vb.net to JAVA. Outcomes of the project: Implemented HDFS File System Provider and extended the Files API for Hadoop file system too. Migrated the data lens tools in excel to JAVA based desktop application. Major Learning Outcomes: Understanding the existing technologies. Learning the new method of implementation. Implementing the project with the new technology. Brief Description of working environment, expectations from the company: The HDFSFileSystemProvider project is based on understanding the working of the apache APIs and how to link them with the existing Files API and to identify the equivalent methods for the HDFS File System. The ramp up process surely helped in gauging the enormity of the project requirements. After having worked on this project for a little over two months now, I have made significant progress and am confident of being able to complete the project in time. As with any development process, the project requirements change from time to time and I believe I have been able to adapt and conform to them. The EDQP Data Lens tools project helped me to understand the nuances and challenges involved in migrating an	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Created mobile app Tools used (Development tools - H/w, S/w):Cordova framework Objectives of the project: Display live tracking on maps Outcomes of the project: Created app for both IOS, android Major Learning Outcomes: JAVAscript, Node.js Brief Description of working environment, expectations from the company: Work environment is very good and people over here are supportive.Oracle expect to have good coding skills in JAVA.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Improving the granulation in the provisioning of a service such that it can run step wise instead of end to end. This saves the overhead created in case of an error midway through a run and improves the flexibility and efficiency of the process. Tools used (Development tools - H/w, S/w):vi editor, host virtual machine, testing virtual machine. Outcomes of the project: GRANULATION OF ORACLE DATABASE EXADATA CLOUD SERVICE PROVISIONING Objectives of the project: Successfully implemented the said objective in platform layer and merged it with the product code-base. This resulted in improved efficiency of the service deployment process. Major Learning Outcomes: Database deployment in cloud infrastructure, database management and coding in Python and JAVA; convincing team members for approval, group discussions, and team coordination Brief Description of working environment, expectations from the company: The work environment is highly supportive for interns as they are treated similar to regular employees. Everybody in the team is highly cooperative and help out whenever needed. The timings are extremely flexible and working from home is permitted. The expectations are mapped out into weekly timelines to which you need to commit and present progress emails at the end of the weekly cycle.	2016- 17- sem1

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	I was assigned two projects during my internship at Oracle. My first project was Enhancement of tests of JAVA.util package and JAVA.text package related to Internationalization which were using deprecated APIs and data structures and replacing them with the latest available option. Also, using Generics, Streams, Lambdas, Autoboxing /Unboxing, Varargs, Enums etc. in the code to make it more efficient. My second project was Development of a stand-alone application demonstrating key I18N features using JAVAFX. The application could detect word, character, line and sentence boundaries in a text, detect directionality of a given text (LTR or RTL) and sort a list of strings, all according to the rules of selected language. Tools used (Development tools - H/w, S/w): JAVAFX, Jtreg , Webrev, IntelliJ Objectives of the project: Project1 : Code maintenance. Project2 : Showcasing key I18N features graphically. Outcomes of the project: Project1: Enhancements have been pushed and will be reflected in JDK-9 Project2: Application could be used to demonstrate the I18N features across different platforms Major Learning Outcomes: Streams, Lambda's, Generics, Data structures, JAVAFx, CSS Brief Description of working environment, expectations from the company: The working environment is fun and flexible. There are no fixed working hours. There are a lot of learning opportunities and not much work pressure so can learn and implement at our own pace. It's extremely important to know JAVA as most of the work here is done in JAVA especially for the JDK team. Overall, it's a nice place to work.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Work was mostly related to improvising and enhancing the existing company product performance and functionality wise Objectives of the project: Optimize various functionalities of Oracle products Outcomes of the project: Performance wise improvised versions of product and some added functionalities Major Learning Outcomes: I got to know how complicated things can get when working on a standard product. I worked on current technologies for development of applications which gave me a huge boost in both the learning and experience perspectives. Brief Description of working environment, expectations from the company: Working environment was pretty cool. Peers helped a lot and they are very informative. It was exactly as what I expected it to be. Overall it is a wonderful experience to work as an intern here.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Build POC for front end migration from ADF to JET for PBCS Application, build custom REST APIs, generate API documentation using Swagger, perform Compliance checks on APIs Tools used (Development tools - H/w, S/w):JDeveloper, Swagger UI Objectives of the project: Build POC for front end migration from ADF to JET for PBCS Application Outcomes of the project: Standalone listing page component Major Learning Outcomes: JS, CSS, Swagger usage, importance of other tasks than just writing code Brief Description of working environment, expectations from the company: The working environment is relaxed. All the people here are very patient and willing to help out in any form. Everyone is afforded the same respect from an intern to the top management. The seniors don't interfere, but help out wherever needed and trust you to complete the task assigned within the given time.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	In my period of my internship, I have worked on 2 major projects, titles being: 1) Data Model Platform - performance enhancement through converting the JPA into JDBC. 2) Swagger Documentation. Objectives of the project: 1) To enhance the performance of the Data model platform by transforming the JPA into Native queries i.e. JDBC. 2) Swagger Documentation: i.e. To incorporate the swagger annotations to the REST APIs and generate the swagger documents and deploy on the server and make them available to the client. Outcomes of the project: The Performance of the platform has been increased by the factor of 2.5 Major Learning Outcomes: I have learnt quite a lot of new technologies. Grabbed the knowledge on, JPA - JAVA Persistence API, EJB - Enterprise JAVA Beans, Web servers, EAR, WAR, REST APIs Brief Description of working environment, expectations from the company: Well, Oracle is great place to work especially for a fresher or an intern. In my case, I was very fortunate to have a great team, they have helped me in the initial stages where I couldn't understand anything. They gave me sufficient time to understand and learn the required concepts and technologies prior jumping into the actual project. Expectations from the company are also reasonable enough, depending upon the expectation they had, they gave the intern the appropriate resources and time to do so.	2016- 17- sem1

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	We built a text classifier application that extracts features from plain text in order to categorize it. This categorization saves time for the company to handle the large number of Service Requests that it gets on a daily basis. We used NLP and ML to achieve this. Tools used (Development tools - H/w, S/w):JDeveloper, SQLDeveloper, Weka, JAVA, PL/SQL Objectives of the project: To build a text classifier application Outcomes of the project: We built an application that categorizes plain text documents. Major Learning Outcomes: Databases, how companies build software, different API implementations of similar applications Brief Description of working environment, expectations from the company: Working at Oracle has been quite interesting. There were no time restrictions, we could come and go at any time as long as we got our work done. We stayed in the office late a couple of times because the work was so interesting we couldn't get ourselves to leave without solving the problem first. My manager was very supportive. He helped us whenever we got stuck on something and encouraged us to explore and learn as much as possible. My team members were also very helpful. I could count on them to patiently solve any problem I got stuck on. Our PS instructor was also very nice, and we had a good time overall. There were team lunches and interns outings during the course of our internship, and it was a fun experience. We started off the internship doing research on how to go about implementing algorithms to classify text. We also did research on how NLP works and how it could be used to extract the gist of any text provided to us. We implemented the algorithms in open source and Oracle software and compared results. This was all done in JAVA. We then implemented it within the Oracle database, and cut down on processing time. Simultaneously, we recorded stats for each API implementation. By the end, we handed over our work to the team who would continue the project after we left. I learned a lot in PS2 and it was definitely an	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Developed performance analyzing and interpreting tool for easy visualizations of thousands of call stack traces generated in any software event which help in finding any bottlenecks in its performance Tools used (Development tools - H/w, S/w):Jdeveloper Objectives of the project: Building call stack profiler Outcomes of the project: Successfully constructed required software Major Learning Outcomes: JAVA Brief Description of working environment, expectations from the company: Good opportunity to learn and grow. Ample amount of time to learn and implement the same	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Designed a User Interface for Monitoring tool which gets data via RESTful Web Services Tools used (Development tools - H/w, S/w):Oracle JET, NetBeans, Eclipse Objectives of the project: To observe the trends of testing tool for a specific period of time via a User Interface Outcomes of the project: User Interface to observe the trends of results of testing suite Major Learning Outcomes: Oracle JET, RESTful Web Services Brief Description of working environment, expectations from the company: They encourage to selflearn. They support you to work with your own pace.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	My work was to certify Enterprise User Security and implement SCIM REST services for OUD Objectives of the project: To make OUD SCIM compliant Outcomes of the project: I completed various implementations of operations. Major Learning Outcomes: You get to learn how to debug, understand the workflow and do some concrete coding to implement the operation required Brief Description of working environment, expectations from the company: The timings are flexible. The work is good but not too hectic either. They treat you like normal employees which is the best part	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	I had to develop an application which monitors the Live Occupancy and Usage of Conference Rooms based on the data obtained from Motion sensors in the Conference rooms and also enabled the booking of Conference rooms in my application. Its really an amazing journey in building this application from scratch all by myself. Tools used (Development tools - H/w, S/w):Motion Sensor, raspberry pi,Tomcat,Mongodb  Objectives of the project: Check availability and book room/facility straight from your Desk/Phone manage space & resources smartly. Outcomes of the project: Live availability and complete statistics of Usage Major Learning Outcomes: Lot learned about new technologies like Rest apsi, Ajax, JavaScript and deep learning in JAVA Brief Description of working environment, expectations from the company:The working environment was really great. Our team of manager and mentor in my project have helped me in all the milestones of my project. Guiding my thought process and helping me in solving issues whenever I got stuck. Its really a great experience working here.	2016- 17- sem1

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	Most of the work was on data mining, machine learning and information retrieval, had to know at least basics on these lines. Text mining was the study that we were doing. Objectives of the project: To create an application to mine text Outcomes of the project: Research on how the algorithms work and improvisations to improve mining model Major Learning Outcomes: Using new API's out of blue Creating and using pl/SQL packages, How customizations and tweaks have to be made to improve an application's performance Brief Description of working environment, expectations from the company: The working environment is excellent, no time constraints (but deadlines have to be met no matter how much time u spend). Its excellent to join in this company as a fresher. Got a lot better after this internship as per the coding terms. PPO depends only on team vacancy and head count.	2016 17- sem1
Oracle India Pvt Ltd. , Bangalore	A robust software which can be used to set up any cloud service easily by just providing a Json file called blueprint. The blueprint is a shareable template which contains the specifications as per which the cloud service should be set up on the virtual machine. It controls the lifecycle operations of the machines such as creation, deletion, re-submit and patching. It has additional tools which help set it up and the virtual machine with the required specifications. It is currently in patching phase and is going through many improvements to make it more dynamic and robust. The different key assignments undertaken have helped the project in many ways such as reduce total time taken, improve efficiency and productivity and setup different cloud services easily without much effort from end user. Tools used (Development tools - H/w, S/w):Eclipse and Oracle Linux Objectives of the project: The objective is to create a software which bootstraps on the underlying Cloud infrastructure and sets up the required virtual machines with the required configurations as per the cloud service requirements. Outcomes of the project: The software achieves full automation of creation, deletion and maintaining the lifecycle of the virtual machines. Major Learning Outcomes: Hands on experience with cloud based applications with their usage as well as coding experience. Brief Description of working environment, expectations from the company: An excellent conducive working environment with stress on gaining knowledge and implementing it rather than doing things mechanically. A very friendly atmosphere without much formalities, however deadlines are expected to be met on time. Work hours are neither long nor short, however it might be expected to stay longer on few crunch days.	2016 17- sem1
Oracle India Pvt Ltd. , Bangalore	My first task was enhancement of WebView test application. I added two test applications to analyze memory consumption of WebView and to analyze performance of JavaScript engine of Web Kit. Tools used (Development tools - H/w, S/w): JAVA, JAVAFX, Python, Gradle Objectives of the project: 1) Improve WebView test application to have more WebView functionalities. 2) Add a reliability test to test top websites which outputs result summary in graphical format. 3) Add a JavaScript Core performance test which outputs result summary in graphical format. Outcomes of the project: 1) Enhanced Hello WebView: WebView test application in the OpenJFX repository. 2) Added a reliability test to analyze memory consumption of WebView API of JAVAFX. 3) Added test to analyze performance of JavaScript engine of WebKit. Major Learning Outcomes: UI development, Performance analysis, reliability testing. Brief Description of working environment, expectations from the company: The working environment was very good and the team mates and manager were very helpful.	2016 17- sem1
Oracle India Pvt Ltd. , Bangalore	I worked on a product named "Planning and Budgeting Cloud Service". The purpose of my project was to analyze the feasibility of a possible migrations from the current ADF technology to a newer JET technology for its Dashboards. I created and demonstrated several PoCs (Proofs of Concepts) to show that such a migration is possible and would leave the company with production ready code. Objectives of the project: To analyze the feasibility of migration to a new technology Outcomes of the project: Successful in proving a possible migration of PBCS Dashboards to JET Major Learning Outcomes: Web Technologies, Full Stack Development Brief Description of working environment, expectations from the company: Oracle has a comfortable working environment with independence of thought. They have all the facilities one can ask for. Given the company is going through a pivot right now, one can expect most teams to be working on cutting edge technology.	2016 17- sem <sup>2</sup>

Company	Experience	Year
Oracle India Pvt Ltd. , Bangalore	The advent of new information sharing technologies has led society to a scenario where thousands of textual documents are publicly published every day. The existence of confidential information in many of these documents motivates the use of measures to hide sensitive data before being published, which is precisely the goal of document redaction or sanitization. Automatizing Named Entity Recognition is a step to redaction. Done a lot of research on using Machine Learning to recognize terms. Implemented them in tools like Python NLTK, Mallet, Stanford NER, Factorie and trained them with own data to create own model. tested them and compared the results. Added a new entity other than what was already there in the Mallet and Stanford NER. Tools used (Development tools - H/w, S/w):Mallet, Stanford NER, Python NLTK, Factorie Objectives of the project: To recognize named entities in unstructured data and further apply document classification and then redaction Outcomes of the project: Learnt more about Machine learning algorithms and also the effort that goes into a new product designing and building Major Learning Outcomes: Team building, Soft skills, Ways to approach a new problem Brief Description of working environment, expectations from the company: Company expects the employee to be more expressive. Even though the idea or the thing he/she is speaking about is not much of relevance or well formed, they want him/her to first speak up about it.	2016- 17- sem1
Oracle India Pvt Ltd. , Bangalore	Enhanced the configuration tool by adding a resource type container support to the product which acts as a proxy server that converts LDAP requests to SCIM requests and vice versa. Worked on automated verification of the server's functionalities with the help of unit tests and integration tests. Also, worked on improving the code coverage of the core code using jacoco tool. Tools used (Development tools - H/w, S/w): JAVA, groovy, Spock, jacoco, ant, XML, JSON, postman plugin for making the REST calls. Objectives of the project: Enhancement of configuration tool of a proxy server by introducing one level hierarchy to the flat hierarchical structure of SCIM. This improved the efficiency of the product. Automation of the verification of the server functionalities to prevent regression. Improvement of code coverage using JAVA code coverage tool to ensure that all the lines of the code is getting validated. Outcomes of the project: Great learning in addition to that we have learned in our academic courses. Practical application of what we have learnt. This PS has provided a very good software industrial exposure. Improvement in my programming skills as well as soft skills is quite noticeable. Major Learning Outcomes: I've almost learned everything from scratch starting from LDAP and continuing with SCIM, JNDI, end-to-end testing, groovy unit tests, mocking, writing Integration tests, JAVA code coverage, to understanding the very core functionalities. Brief Description of working environment, expectations from the company: The work timings were really flexible. I found the work being quiet interesting day after day. Everything contributed to a new learning. I've got an immense support and guidance from my team which helped me to improve myself both knowledge wise and personality wise in the past few months. The work we do in this internship contributes to our PPO chances if we have a good feedback from the manager in addition to the availability of team openings. Faculty Student	2016- 17- sem1
Oracle India Pvt Ltd. , Hyderabad	Worked on Oracle Transport Management Cloud (OTM). Developed a Diagnostic Viewer application to allow end users to review their as well as OTM Engine's decisions about bulk orders Using Oracle ADF. The basis for the application was converting a raw unreadable log file into a proper tree Data Structure where each level indicates a step-in order planning. Some more functionalities such as filtering, auto suggest search and statistical analyzer were also added to improve user experience. All the business logic was implemented using JAVA and managed beans and rendered using ADF UI Components. Tools used (Development tools - H/w, S/w): Eclipse IDE, Eclipse MAT, Jdeveloper, Jrockit. Objectives of the project: To Enhance Oracle OTM Diagnostic Framework Using ADF Outcomes of the project: Completed the application by the end of the internship. Major Learning Outcomes: Leaned about Software development, design, Time Optimization, Memory optimization. Brief Description of working environment, expectations from the company: The work environment was great and my mentors and manager were very accessible and helpful. My work was constantly checked upon and I was treated like an employee. Overall, It was a very good learning curve.	2016- 17- sem1

Experience Year Company My PS 2 was good learning experience. First two weeks were spent in getting to know the team and understanding the kind of work. We had brief sessions on the product and its working details by our colleagues. Then all the interns had 2 weeks training on JAVA and ADF which are the common technologies expected to be used for our projects. Then we had a learning phase where they gave us reading material to go through and gave small tasks each day to progress with understanding. Then I have been assigned a project on Unit testing their product. Next few weeks for understanding the requirement. HCM Data Loader helps in integrating the data from other sources into Oracle Fusion. The working of the data loader and main processes involved are transfer, import and load. The business objects involved and structure of files for loading the data is different for different objects. JUnit is a unit testing environment which tests the output of the code before implementation. The need for JUnit creation and how it helps in easy 2016-Oracle India Pvt Ltd., debugging is understood. Out of the three-main process that occur during loading data through HDL, 17-Hyderabad transfer is the first one. Unit tests for this transfer process are created. These tests are independent of sem1 object being used. Also, a generic way of validating new cases with minimal input parameters has also been implemented using the concept of inheritance and further scope of the project is to continue this for other processes. Tools used (Development tools - H/w, S/w): Environment used - JDeveloper Software tools -JAVA, JUnit Objectives of the project: HCM data loader is the utility which helps in loading bulk data into Oracle Fusion. Exhaustive unit testing for the processes involving in the data loader and testing all the validations performed in order to help in easy debugging and developing the product further. Outcomes of the project: This Unit testing helps in maintaining the product efficiently and easy debugging of the product. Major Learning Outcomes: Technical skills, Integrity, Team work, Professional Behavior. Brief Description of working environment, expectations from the company: Friendly working environment. Team mates are more than willing to help us. Development of data (.dat) file generation utility which is used for functional verification of stage/Test Instance of HCM Data Loader after applying the patch bundle to it. Tools used (Development tools - H/w, S/w):Application Development Framework(ADF) Objectives of the project: After a patch bundle was applied to test instance, the customer has to check for functionality manually. In case of HCM data Loader, all the different types of dat files used by customer have to be generated and verified in the test instance. 2016-Oracle India Pvt Ltd., The whole process is time consuming and tiresome and requires a lot of resources. To avoid resource 17-Hyderabad wastage, the whole processes have to be automated. This can be achieved by developing a utility such that sem1 it generates the data files (.dat) automatically and loads them into HCM data loader, verifies the functionality and generates the report. Outcomes of the project: Reduction of time wastage for testing the instances of HCM Data Loader. Major Learning Outcomes: Deep understanding of SQL && database systems, JAVA acquaintance with ADF. Brief Description of working environment, expectations from the company: Working environment is good . mentor and manager have been very supportive and helpful. The objective of the project was to build a mobile application for dynamic data visualization. That is enabling user to choose the data that has to be visualized, in the format, he wants to visualize it in and also displaying it in the position/order he chooses, thereby giving more control to the user. When the user selects the data, and submits it, the remote database is queried and the result is then used to populate and display the graph in the format and position specified by the user. The tools used to achieve this are -Jdeveloper 12c IDE - ADF, MAF, Oracle Database. The business logic was implemented using JAVA and Oracle SQL. Tools used (Development tools - H/w, S/w): Oracle Jdeveloper 12c -Mobile Application Framework, Application development framework, Oracle Database Objectives of the project: The objective of the project was to build a mobile application for dynamic data visualization. Outcomes of the project: Created a Mobile Application that enables user to-select the tables from which data has to retrieved, choose the format (Pie/bar/line chart) to visualize data, select position in dashboard to display the chart. Major Learning Outcomes: Learnt about the working of the company. Technical KnowledgeWorked with 2016-Oracle India Pvt Ltd., JAVA and SQL language and learnt how to write clean, efficient code. Worked on Jdeveloper to Use 17-Hyderabad MAF, ADF, Oracle Database and also learnt about RESTful Web Services. Was able to polish my social skills sem1 Brief Description of working environment, expectations from the company: Working in Oracle India Private Limited (Hyderabad) was a very good experience. The working environment was positive and I was able to learn a lot of things. We had training sessions on JAVA and ADF before the projects were assigned to us. The Managers, Mentor and employees were very supportive and helpful. The project given to me was to build a mobile application for dynamic data visualization. Besides what was taught in the training I had to learn Oracle MAF and RESTful Web Services as prerequisites to start working on the project and I was given necessary support and resources for doing the same. I met frequently with my mentor and manager to review the progress in the project and also to clear doubts regarding it. The project was interesting and challenging, and improved my technical skills. Besides technical knowledge, I also got an idea of the working of the company. I was also able to improve my social skills. Overall, the PS-2 program at Oracle was very productive.

Company	Experience	Year
Oracle India Pvt Ltd. , Hyderabad	Oracle FUSION is a cloud based enterprise resource planning application of which Human Capital Management (HCM) is one of the sub-products. As this is a cloud application, there is a need for integration with on-premises applications for which HCM Data Loader tool is widely used. Data is to be loaded as a DAT file with a specific format onto the cloud. But if data is provided by some third parties to the customer, there is a need to change this format to that of the specified format. In order to automate this, an utility tool is built which uses a configuration file to convert any input file into the required format specific DAT file. Advanced features include validations and defaulting values for which same configuration file can be used. Later these DAT files can be uploaded onto HCM cloud using HCM Data Loader tool. Tools used (Development tools - H/w, S/w): JDeveloper Objectives of the project: Build a utility tool which can convert any input file into a respective output file with a specified format given by a configuration file Outcomes of the project: A tool is built where input files like a CSV or XML file with data can be converted into an output file (DAT file) specific to the given format provided by the configuration file. Data can also be defaulted and validated before writing it to the output file where the valid and default values are given in the configuration file Major Learning Outcomes: Understanding of Databases, SQL, JAVA, Oracle Applications Development Framework (ADF), XML, XSL (Stylesheet Language for XML) Brief Description of working environment, expectations from the company: It is a great environment to work where one is expected to do the work given to that person on time. Mentors and other colleagues are very approachable.	2016 17- sem1
Oracle India Pvt Ltd. , Hyderabad	Oracle Business Activity Monitoring analyzes information and data before, during and, after business events. It provides real time matching, trend analysis, rolling-window computation, and both static and dynamic thresholds. It has a build-in continuous query language engine evaluates incoming event streams against business requirements and data patterns of interests. We can define these patterns using with easy to use business query and key performance indicator templates. Based on these patterns we can implement variety of alerts and actions. Oracle BAM provides a variety of visually effective and easy to read dashboards for all major components of Oracle Business Process Management (BPM) and Oracle Service Oriented Architecture (SOA). With the adoption of Oracle Application Development Framework, Data Visualization Tool (DVT) components, Oracle BAM provides us with various visualization components to add to our dashboards. Tools used (Development tools - H/w, S/w): S/w - JAVA, SOA, Oracle ADF, Oracle BAM Objectives of the project: Updating the Oracle Fusion Middle Ware Order Orchestration User Interface to work in real time using Oracle Business Activity Monitoring. Outcomes of the project: The current graphs of Fusion Order Management which shows order status and errors are changing in real time preventing the employees from refreshing them again and again. Major Learning Outcomes: Learnt about how Business Intelligence support growing management issues that organizations face. Learnt about Oracle Business Activity Monitoring, how to make interactive dashboards, proactive alerts. Also, learnt about service oriented architecture and Oracle application development framework. Brief Description of working environment, expectations from the company: Work environment of oracle it very friendly and open. Even the managers insisted us not to call them sir/ma'am. Employees are very helpful, they almost never turn you down when you need something.	2016 17- sem1
Oracle India Pvt Ltd. , Hyderabad	Developed a design page with certain functionalities which will be implemented in the new Spreadsheet data loader functionality. Tools used (Development tools - H/w, S/w): Oracle ADF (Application Development Framework) Objectives of the project: Objective was to develop the user interface with certain functionalities for the new functionality about to be implemented in the product. Outcomes of the project: The design page created by us will be used in the future when the multi-tab model of the spreadsheet data loader is ready. Major Learning Outcomes: Learning the framework and understanding the functioning of an organization Brief Description of working environment, expectations from the company: Working environment is great. People around will always help.	2016 17- sem1

Company Experience Year

Initially, I was given a work to develop a new feature for Oracle Cloud Commerce which converts JSON hyper schema to Swagger metadata schema for documentation of the endpoints API. I have studied how the REST API, swagger works and its part of OCCS. Then I have developed a JAVA class which converts the endpoint docs. Then I have tested the developed feature with various scenarIOS and found various bugs and fixed them. After the new feature, had been integrated to the main software, I was asked to study how the main software works and fix the bugs assigned to me in the main software by learning the about the various technologies used in it. Tools used (Development tools - H/w, S/w): Eclipse, JAVA, Jira, KnockOut JS, REST API, Swagger 2.0 Objectives of the project: The main objective of my project is to learn how Oracle cloud commerce services work and understand the technologies used in the development of the software and fix the bugs. The secondary objective is to develop a new feature which converts JSON hyperschema to Swagger metadata schema for documentation of the endpoints API. Outcomes of the project: A converter which converts the JSON hyperschema to Swagger metadata schema and a various bug fixes for the software. Major Learning Outcomes: I have learned how a software is developed with methodologies like Agile, waterfall. I have earned a good knowledge in JAVA, REST Api, Swagger. I have understood how Oracle Cloud Commerce works as a software. Brief Description of working environment, expectations from the company: My overall experience at Oracle is excellent. When I first joined this company about five months ago, I am new to the software company but the peers here have been very helpful. Initially, I was given a work to develop a new feature for Oracle Cloud Commerce which converts JSON hyperschema to Swagger metadata schema for documentation of the endpoints API. For the first two weeks, I have spent most of time in studying how the software works and what is the use of REST API in a software and understood them. Then I have started developing for the feature they have asked me for. I have got a great support from my mentor and peers who have helped me in studying and understanding the project. On a whole, it was a great experience where I just didn't learn how to code or test but learned about expert guidance, apprehending new technologies and their developments and building a character. The most of the project, I was not given the clear-cut vision about some of the technologies and the development and I had to research about them to understand which was of a great use which not just only used for that project but also used for a common learning about the technologies and the trends. We also had some leader speaker series in which we had a tele presence conference with the other interns and a professional from Oracle, who discussed on various trend in software and technologies. Later when the swagger project was completed, I was given the work of fixing various bugs in the software. Fixing bugs involves studying and understanding the code already written and find the code which is causing the bug

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Oracle India Pvt Ltd. , Hyderabad

Oracle India Pvt Ltd., Hyderabad TEST AUTOMATION USING OATS AND NOTIFYING ADF APPLICATIONS FAST AND LEAN USING DATABASE QUERY RESULT CHANGE NOTIFICATION. DEVELOPING FUNCTIONALITY OF UNIFIED DASHBOARD INFOLETS IN ORACLE FUSION WEB APPLICATION. Tools used (Development tools - H/w, S/w):OATS,QC,JDEVELOPER,LINUX Objectives of the project: NOTIFYING INFOLETS IN FUSION WEB APPLICATION OF DB CHANGES WITHOUT USER EXPLICIT QUERY Outcomes of the project: MADE USER KNOW THAT DB CHANGES ARE PENDING IN FUSION WEB APPLICATION AND TRACKED THE ENTIRE EVENTS OVER THE WHOLE ARCHITECTURE. Major Learning Outcomes: GETTING A DETAILED UNDERSTANDING OF THE WHOLE EVENTS AND THEIR PROGRESSION THROUGH THE TIERS OF ADF AND IMPLEMENTED THE SAME ON FUSION WEB APPLICATION Brief Description of working environment, expectations from the company: WORK ENVIRONMENT EXCEEDED EXPECTATIONS OF ME SINCE I WAS A PART OF TEAM FROM THE FIRST WEEK.PROJECT STRUCTURE IS VERY WELL DEFINED AND PROGRESS IS WELL MONITORED.CREATED A PLATFORM FOR STUDENTS TO MAKE USE OF THE TOOLS AVAILABLE AND DEVELOP BOTH TECHNICAL AND COMMUNICATION SKILLS.DAILY SCRUM MEETINGS RESOLVE MOST OF THE ISSUES THAT ARE PENDING.OVERALL A VERY GOOD LEARNING EXPERIENCE.

and fix it. It has added a lot to my knowledge. I was able to learn a lot of new concepts and standards,

overall it was an enriching experience interning at Oracle.

2016-17sem1

Company Experience Year

Automation of Document-Set generation is important to reduce the time and labor invested in the current process in work. The user interface is to be designed by encompassing the features of advanced Application Development Framework and those of Oracle Business Rules. The main objective is to create a custom Document-Set which fully incorporates all the consumer requirements using just the information about the sales order and inventory database of the company. Tools used (Development tools - H/w, S/w): Application Development Framework, JAVA, Oracle Business Rules, Visual Information Builder Objectives of the project: In the process of shipping an order, several documents are required to be shipped alongside the product. The number and type of these documents solely depends on the requirements of the consumer. The objective of the project was to find and implement means to automate this process and submit the Document-Sets (set of documents required for an order) at the time of ship-confirmation. Outcomes of the project: A prototype rule based User Interface was successfully developed using Oracle Business Rules and Visual Information Builder. The idea was to prove that an existing technology can be used to develop this User Interface and achieve the above-mentioned objective. This was proven with the prototype application. Major Learning Outcomes: Oracle Technologies: Opportunity to learn technologies used in oracle (Application Development Framework, Oracle Business Rules, Visual Information Builder). Professional Collaboration: Opportunity to work in collaboration with professionals. The project demanded a working understanding of new technologies not commonly used in the Logistics department. I got to interact with many employees and gathered their experience to move forward. Working of the Company: Opportunity to learn the working of the Logistics department, moreover the working of the Shipping section of Logistics. Brief Description of working environment, expectations from the company: The working environment of the company was excellent, everyone was helpful and supportive. At every point of time, my mentor was there for any assistance I required. The overall experience was very nice, it

PS - II provided me an opportunity to put my theoretical knowledge into practice. It gave an industrial exposure and an experience of the real world scenario suitable for my technical background. After having spent duration of five and a half months at my PS - II station, Oracle India Pvt. Ltd., I can positively say that I have gained a lot of confidence and expertise to face the challenges in the industrial world. The first few weeks were filled with anxiety as everyone was new. Since my team is filled with experienced people and only one fresher, every conversation was a learning in itself. There is a lot of emphasis laid out on grooming

2016-17sem1

Oracle India Pvt Ltd. , Hyderabad

newcomers. Even the higher line managers spend a decent amount of time talking to interns and learning about our experiences with the view of making it better for us and the company. The career advice that I have received from my mentors and manager have given me valuable insights into what my strengths are and what I should be focusing on. There are some things that can be incorporated in our academic courses especially the disciplinary electives - as projects which require students to use the toolkits that are employed in the industry. It will be interesting to have an academic project that goes through the cycles followed in the industry - design, development, testing, documentation, deployment. My PS II project was "Releasejango" a tool to do label level validations, which gave me an exposure to both front-end and backend development. My learning began with brushing up of complete basics of Web Development that is, HTML, CSS and JavaScript which involved some UI enhancements in existing tools. Back-end development was in python and Django web framework (which was completely new to me) assistance from my mentor helped me understand it a bit faster. Initially coding for even a small task took quite some time until I got used to it. As my understanding increased I learnt a lot thing like code optimization, and looking for

loopholes in the current code. I was able to point put my own mistakes while coding and correct them immediately. This gave me a lot of confidence. I also learnt to work in a team and be able to estimate my own progress as we had to constantly provide ourselves with practical deadlines. The valuable experience I gained by working has definitely enhanced my knowledge base to great extent and has improved my future career prospects by gaining valuable industrial experience. Tools used (Development tools - H/w, S/w): Python, Django, Oracle SQL, HTML, CSS, JavaScript Objectives of the project: Examining the quality of code by consolidating various scans \ checklist results in a single report Outcomes of the project: Quality assessment of code before pushing to production Major Learning Outcomes: Effective Team-Working, Real-world application of theoretical knowledge, Time management Brief Description of working environment, expectations from the company: The working environment is awesome. There is a lot of emphasis laid out on grooming newcomers. Even the higher line managers spend a decent amount of time talking to interns and learning about our experiences with the view of making it better for us and the company. There isn't any lock in time per day i.e. compulsory stay of specified time in office, as long as we complete the work assigned to us we don't face any issues. If we are stuck somewhere with our work

was easily better than any expectations I had from an IT company.

2016-17sem1

Oracle India Pvt Ltd. , Hyderabad

everyone is willing to help us out.

Company	Experience	Year
Oracle India Pvt Ltd. , Hyderabad	I completed two major projects during my six-month internship at Oracle. I started with developing a hybrid mobile application. I got to learn so much about different kinds of mobile apps and the development process, multi-platform issues to be kept in mind and I was familiarized with the practical aspect of the things that I learnt in my 4 years at BITS - namely factors such as budget, current developer skills, and time and client requirements. The outcome of the first 3 months was two mobile applications - an employee database manager app and a Higher education WLP application for universities. After that I started working on developing an automation reporting tool based on OJET nad used NodeJS to automate the backend process. It was an extremely enriching experience to learn from and interact with people from across the world and be able to develop a live tool with them. Tools used (Development tools - H/w, S/w): OJET, Android Studio, NodeJS Objectives of the project: Hybrid Application Development; Automation Tool Dev Outcomes of the project: Automation reporting Tool was launched and is being used by the SOA team currently to manage and analyze all SOA test result logs. The hybrid application development helped the team to visualize their application on the Android platform and enhanced the responsiveness and several other features for the application to be capable of multi-platform efficiency and functionality. Major Learning Outcomes: Automation scripting languages; JavaScript, GitHub, etc. Brief Description of working environment, expectations from the company: The first few weeks were filled with anxiety as I did not have a CS background unlike most other interns. But Oracle trained all interns in JAVA and ADF, that would be required for our projects which was really helpful. There are some things that can be incorporated in our academic courses - especially the disciplinary electives - as projects which require students to use the tool-kits that are employed in the industry - design, development, test	2016- 17- sem1
Oracle India Pvt Ltd. , Hyderabad	Automation, Developing new Products Tools used (Development tools - H/w, S/w): Core JAVA, JAVAEE, Python, Android, Apache Cordova, Oracle Frameworks Objectives of the project: New product development Outcomes of the project: Prototyping/ Demoing new Products Major Learning Outcomes: New Technologies Brief Description of working environment, expectations from the company: Good working environment, nice team, nice work.	2016- 17- sem1
Oracle India Pvt Ltd. , Hyderabad	1. Oracle ADF design patterns 2. How tables are joined in read-only view objects 3. How dependent view links are created 4. Use of ADF faces components to create a page 5. In-depth learning about HCM data loader and HCM Spreadsheet data loader 6. Familiarity with kinds of keys used and their applications 7. Use of .dat and .xls files to load data into HCM Fusion 8. Acquired know-how of the flexible framework of Fusion HCM Employment model to meet a wide range of business requirements 9. Development skills in JAVA and HTML 10. End-to-end development of web page and associated data collections Tools used (Development tools - H/w, S/w): JAVA, Oracle ADF, JDeveloper, SQL, PHP, WebLogic Server Objectives of the project: Developing a Feature for easy automation and searching through datasets Outcomes of the project: Creating a webpage based on the existing framework Major Learning Outcomes: Learnt about end-to-end development using JAVA, JavaScript, php and other technologies Brief Description of working environment, expectations from the company: Learning how each aspect of a product is developed was a truly enriching experience. We were involved in making a quick access page for ease of use. But even this took a considerable amount of learning and knowledge transfer. However, it is truly gratifying to realize how what we developed fits into the big picture which the product release as a whole. Just understanding how the framework works and aids the developer was illuminating. My first steps into the corporate world have been this internship. The amount of new experiences and learning I have derived at Oracle, I could not have done anywhere else and I am grateful for this opportunity. The goals I had at the beginning of this internship have been fulfilled and have been exceeded by a boost in my self-confidence and my skillset. The community at Oracle is friendly and the environment is constructive for innovation and teamwork. The facilities are ample and refreshing along with being state-of-the-art. Most importantly	2016- 17- sem1
Oracle India Pvt Ltd. , Hyderabad	Created a Chatbot to access Services like JIRA and Bug DB from an XMPP Chat client like Pidgin. Tools used (Development tools - H/w, S/w): OpenNLP, REST API, Smack API, Bug API Objectives of the project: To create a smart Chatbot with autocorrect features and user impersonation to access various services. Outcomes of the project: Objectives achieved. Major Learning Outcomes: NLP, SQL, Application Development Brief Description of working environment, expectations from the company: Friendly, congenial atmosphere. Helpful colleagues. Student	2016- 17- sem1

Company	Experience	Year
Oracle, Hyderabad	The project consisted of developing a new Rules-engine which can handle Business invoices, expense reports mainly, but not limited to these prominent use-cases. The objective was to build an application which can handle inputs in the form of spreadsheets or from data-tables and can evaluate them against the rules which are pooled in an efficient way to remove redundancy caused by multiple unnecessary evaluations. Decisiontables were built to represent the same and predecessor results were cached to prevent extra I/O calls to the database which has been found to be pretty costly especially when the modules were deployed onto the server. It requires further enhancements to incorporate many business cases and advanced modes in order to make it production ready but a working prototype has been successfully deployed which is showing considerable improvements over the current offering. Tool used (Development tools - H/W, S/W): Java, MongoDB, XML parsers, PL/SQL Objectives of the project: To build a full-fledged Rule-engine which can address the high-memory usage issues faced by the previous application and to improve upon the evaluation performance. Major Learning Outcomes: The decision to make multiple I/O calls to the database can be tricky when handling huge amounts of data. While having a cache within the heap addresses this issue, the heap usage increases which has it's own demerits. Further, design choices made during the first phase before the implementation is the most crucial thing to consider as this is what drives the project into a certain direction, diverting from which can be very costly later on. Details of Papers/patents: Approval on a patent for the new approach to a condition-table based rule-engine is pending. Brief Description of working environment, expectations from the company: The work depends upon the team assigned to an intern. In my case, the team has given me a lot of encouragement to drive the project in the way I visualize. I've had the freedom to make both the design choices and the too	2018- 19- sem1
Oracle, Hyderabad	First project: Worked on creating web page using Java script to provide batch delete and update functionality to the customers. The records are fetched using rest API and can be updated or deleted. Second project: Built a tool for automating testing. Mainly, wrote a bash script which can be called everyday as a crone job. Third project: developed a tool to find label for each click Id that registers in the log files at the server level whenever it is clicked in the UI. Main job in this project is to develop parsers. And also did small tasks like detecting number of times a bug is occurring in error logs, finding long running jobs in ESS sheduler etc Tool used (Development tools - H/w, S/w): Java script, Java, Bash, python, sql Objectives of the project: Creating user friendly and authentic tools for the customers Major Learning Outcomes: Became good at SQL, JavaScript and bash. Had a bigger level view of things. Brief Description of working environment, expectations from the company: Environment is good. Team members are very helpful. Academic courses relevant to the project: Oops, DSA, C programming Name: Kushagra Deepak Saxena (2105A7PS0099H)	2018- 19- sem1
Oracle, Hyderabad	Most of the work was on queryies, Development Tool used (Development tools - H/w, S/w):  SQL(advanced), Data Structures, Java, JavaScript, SQL Developer, Oracle Linux, Python, REST Services Objectives of the project: Click Stream Analysis, REST Services Major Learning Outcomes: SQL-PRO, REST Services knowledge, click id labeling learning Academic courses relevant to the project: DATABASE (still not enough at all), Data Mining only Student Name: Nagaraju Machavarapu (2015A7PS0001H)	2018- 19- sem1
Oyo Rooms (Tech) , Bangalore	My project involved working with Oyo Life Backend Services Added functionalities like Guest Move In, Guest Move Out, Inventory Correction in the Oyo Life Consumer App Developed an Offline Tickets Download feature in Maestro Website Developed an App Rating Feature in the Oyo Life App which significantly increased the rating from 2.8 to 4.1 after the release Worked with Monitoring tools like Grafana to improve the performance of the Oyo Life Maestro app. Tool used (Development tools - H/w, S/w): Java, Spring Boot, Postgres, MongoDB, Python, Kubernetes, Jenkins, AWS Objectives of the project: Adding more functionalities and Improvements in the consumerfacing Oyo Life App and staff-oriented Maestro App and Website. Major Learning Outcomes: The main learning outcome was working with the microservice architecture which is increasingly becoming popular nowadays for stability, maintainability and performance purposes. Learnt essentials of backend development, writing optimised production ready Details of Papers/patents: Brief Description of working environment, expectations from the company: There are no formal projects for the interns and no official training period as such. The interns are expected to work with normal employees starting with small tasks and later on big tasks as they become familiar with the tech stack. Working environment is very good. Working hours are flexible. The teams are well balanced and the mentors are very helpful and approachable. Academic courses relevant to the project: OOPS, DBMS Student	2019- 20- sem1

Company	Experience	Year
OYO Rooms, Gurugram	Software development (JAVA) Tool used (Development tools - H/w, S/w): JAVA, Spring Academic courses relevant to the project: Object Oriented Programming Name: Akash Goel (2015A3PS0321H)	2018- 19- sem1
OYO Rooms, Gurugram	1.HeatMaps of oyo vs non oyo hotels 2. Addition of value added service feature on Orbis App 3.  Deduplication of hotels Tool used (Development tools - H/w, S/w): Ruby on Rails SpringBoot Eclipse RubyMine Objectives of the project: 1.Implementation 2. End to End testing Major Learning Outcomes: 1.  Write Production ready code Academic courses relevant to the project: OOP, DBMS, Name: Akash Aggarwal (2015A8PS0338P) Tool used (Development tools - H/w, S/w): Ruby on Rails, Mongodb, AWS, Postgresql, Kafka Objectives of the project: Backend tasks Major Learning Outcomes: Learned writing quality code, working with different teams Academic courses relevant to the project: OOP Name: Mayur Krishna Gupta (2014B3A80707P)	2018- 19- sem1
OYO Rooms, Gurugram	- Data Engineer Profile. Had to build tools for analytics team, automate processes and data handling. I also got an opportunity to involve in the analytics part Made user interactive Dashboards via SQL queries by aggregating data from standard tables and calculated different metrices related to Pricing/Occupancy and applied different filters to make these user friendly and easy to compare Completed tasks allotted by the team, such as persisting history of hive-server2 through Kafka, implementation of Ranger for granting only access permissions to users/teams, Performing Aggregations on standard tabular data and then storing them in External tables, so that end users can directly fetch/use data to perform analytics or make reports. Tool used (Development tools - H/w, S/w) : SQL, Spark-sql, Hive, Hadoop, Spark, Sqoop, IntelliJ, Confluent-Kafka, Presto, Starburst-Presto, AWS Technologies (EC2, S3, EMR, HDFS, Zeppelin), Scala, Airflow, PyCharm, JAVA ,BI tools - Apache Superset, Metabase Objectives of the project : Automation, Data handling, performance analysis, Implemented different team related tasks Major Learning Outcomes : Data handling and visualization tools, Big data Architectures and Hadoop, Explored the usefulness of data, (for Eg, the events data collected from android and iOS apps) and Quantifying this data by introducing some relevant metrices like Booking-conversion rates, Click through rate, consideration rate etc. Brief Description of working environment, expectations from the company: The work hours are flexible and the people are really helpful. But we need to take interest in the tasks given and approach them. No issues if you can complete your deliverables within the timeline. Academic courses relevant to the project: DBMS, OOP, OS Faculty Name: Dr. Padma Murali	2018- 19- sem1
OYO Rooms, Hyderabad	The project involved aggregating various existing backend services and outputting data that can be easily utilized and displayed in the frontend in a client interaction application. The application would help improve customer experience and personalize it with the help of readily available information, instant feedback and timely notifications. Tool used (Development tools - H/w, S/w): Thrift, AWS DynamoDB, Spring Boot, Java (IDE: IntelliJ IDEA CE), React Native, JavaScript (IDE: VisualStudio Code) Objectives of the project: Full Stack Development Major Learning Outcomes: Essentials of Back End and Front End development (specifically for mobile applications and related micro services) Brief Description of working environment, expectations from the company: There is no official training period, the interns were given a tech stack to familiarize themselves with after which they dove right into the project. While there are no hard deadlines, the intern is expected to frequently inform mentor and entire team about the progress made. There is a daily stand up meeting in which all team members discuss their tasks for the day and the issues they faced/are facing. The team members are helpful but no one asks particularly checks on your work, you will have to ask for help if you need it. Academic courses relevant to the project: OOP (not necessary but helpful) Name: Rathi Amreshwar Vishnudasji (2014B1A30786H)	2018- 19- sem1
OYO Rooms, Hyderabad	The back end development for new product called OYO events. Tool used (Development tools - H/w, S/w): Postman, spring boot, InelliJ Objectives of the project: To make large bookings at oyo easy Major Learning Outcomes: well aquatinted with JAVA and AWS Brief Description of working environment, expectations from the company: The company expects you to know all the technologies and developmental coding beforehand only. Though they will tell you what to study, you have to do it on your own. You can expect least help from anyone on any issue. The working culture is startup based where you are supposed to deliver on time. The expectations are higher from an intern. As it was first time the company didn't know how to treat the interns. Academic courses relevant to the project: OOPS, DBMS Name: Dhruv Pandia (2014B2A80535P)	2018- 19- sem1

Company	Experience	Year
OYO Rooms, Hyderabad	During PS-II at OYO Rooms,I was assigned a task of developing a completely new service called OYO Events ,which manages booking for a large event such as corporate event, exhibitions,wedding etc.It provides the solution in mainly three ways which are Event on boarding and package creation, Bulk booking Management Dashboard & Intelligent Room Allocation System Tool used (Development tools - H/w, S/w): Spring Tool Suite, Angular Framework, Amazon Web Services,Thrift Objectives of the project: Manage Room Booking for a large Event Major Learning Outcomes: Creating an API, Integrating Database into project, Web Development. Academic courses relevant to the project: Object Oriented Programming,Data Structures Name: C PRANAY REDDY (2014B4A80757P)	2018- 19- sem1
OYO Rooms, Hyderabad	I have made use of statistical and deep learning models to forecast the number of used room nights against time in hospitality industry. In addition to the above, A lot of time was spent on automating the mechanism. Tool used (Development tools - H/w, S/w): Python, Amazon web services Objectives of the project: To forecast the Demand in the upcoming days across cities, Zones and Clusters. Major Learning Outcomes: Machine learning Algorithms, Python and Operating systems. Student Name: Aditya Bhatia (2015A3PS0237G)	2018- 19- sem1
OYO Tech , Gurgaon	I was involved in multiple projects which involved backend as well as frontend development. Backend development was done in Java whereas frontend development was done in Ember. Js which is built on JavaScript. I was a part of the Operations Technology team. My team was responsible for all the platforms built for room level as well as hotel level auditing of all the OYO properties all over the world. I was responsible for creating a full stack webpage for automating the whole process of creating Audit Configurations. I also worked on a new incentive plan for Property Manager of a hotel where he/she would get incentives proportional to the number of walk-ins on that hotel. This project was done in Ruby. Tool used (Development tools - H/w, S/w): Java, Ruby, JavaScript, Ember. JS, IntelliJ, VS Code Objectives of the project: Explained above Major Learning Outcomes: Learnt how to write clean code. Learnt new technologies. Learnt new ways to solve a problem. Details of Papers/patents: Brief Description of working environment, expectations from the company: Good work environment. As long as your work is on time, no one is going to say anything. Academic courses relevant to the project: OOP	2019- 20- sem1
OYO Tech , Gurgaon	The PS was wonderful. I got PPO in it. Tool used (Development tools - H/w, S/w): SpringBoot, Ember.js, Javascript, MongoDB, Postgresql, Java Objectives of the project: Backend and Frontend Development Major Learning Outcomes: Software Development Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Working Environment is very good. Also, working hours is flexible. Academic courses relevant to the project: Object Oriented Programming	2019- 20- sem1
OYO Tech , Gurgaon	- Developed backend for referral program: A refers B, both are rewarded on signup and checkout as per the existing scheme running in their segment Fullstack development of the Audit platform for scheme change in different segments. The platform automated the task of scheme change by the business; where on request for a change, an approval link is mailed and the scheme replaces the previous active scheme. Tool used (Development tools - H/w, S/w): SpringBoot, JAVA, PostgreSQL, Redis, Angular, AWS, Kubernetes, Jenkins, Git, Postman Objectives of the project: Build Referral Program (similar to that in GPay) where both referrer and referee are rewarded based on the scheme running in their country and an Audit platform for change in schemes. Major Learning Outcomes: Fullstack development with very good opportunities in both Backend and Frontend. I worked mostly on Backend and had opportunities to work on AWS and kubernetes both, but that is completely dependent on random team allotment. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: There are definitely ample opportunities to learn and I strongly recommend this PS station if that is your goal. But at the same time, there are issues in terms of structured operation of the tasks, as in my team after the development of the complete task, on the day of final presentation seniors were discussing the layout of the project from scratch and wanted the 6 months task to be delivered in a week. Academic courses relevant to the project: OOP (Design Patterns), OS (may be), rest they give time to learn once you join. So, no prior preparations if you are well versed with at least one language.	2019- 20- sem1
OYO Tech , Gurgaon	Backend development of features in SpringBoot JAVA and frontend development in React JS. Tool used (Development tools - H/w, S/w): IntelliJ IDE,Webstorm IDE,DataGrip Objectives of the project: Introduction of new features and design revamp of Partner Page Major Learning Outcomes: Design pattern, SpringBoot framework, React JS Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The working environment is very healthy and supportive. All the teammates are very knowledgeable in the field and help at every step to get the best out of you. Academic courses relevant to the project: OOP,DBMS,DSA	2019- 20- sem1

Company	Experience	Year
OYO Tech , Gurgaon	SAP Syncing Stability Tool used (Development tools - H/w, S/w): AWS, KAFKA, HIVE, RUBY ON RAILS Objectives of the project: Syncing Accounting formats to Sap after Validating the data Major Learning Outcomes: Skill to Develop Application, Ownership, AWS, Kafka Details of Papers/patents: - Brief Description of working environment, expectations from the company: Its a wonderful experience that PS2 has enable me to explore industrial presence.Regarding Company culture, Very Encouraging and supporting working environment. Ownership is most important while making an impact with your work which I learnd a lot from team. We are always welcomed to give new and unique ideas. Academic courses relevant to the project: Dsa, Oops, Os Student	2019 <sup>,</sup> 20- sem1
OYO Tech , Hyderabad	Worked as a full stack developer in the Supply chain management teach team. I worked on development of various features foe their Unified ordering platform called OYOsis. Tool used (Development tools - H/w, S/w): Spring Boot, React Js, Apache Kafka, Apache thrift, AWS Objectives of the project: Development for various features for the SCM team's ordering platform. Major Learning Outcomes: Learned front end development using React and Back-end development using Java Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment was very friendly with flexible working hours. The team assigned to me was also very friendly and helpful. Academic courses relevant to the project: Object Oriented programming, DBMS Student	2019 20- sem1
PayPal Chennai	Goal in the start was to build a dashboard for easy monitoring of the disputes coming in and how and by whom they are being resolved. This Dashboard can be monitored daily to refrain from using SQL queries to find out statistics on the data coming in. By being able to visualize this data graphically on the dashboard, we can easily identify where the problem arises from, if any. Tool used (Development tools - H/w, S/w): TeraData SQL, Tableau Desktop Objectives of the project: Daily monitoring of all workflows Major Learning Outcomes: SQL and Database knowledge Brief Description of working environment, expectations from the company: Very chill environment and lenient deadlines. Mainly spend the day going through databases to clean them out and then build needed dashboards. Academic courses relevant to the project: DBMS Name: Hamza Iqbal Ali (2015A7PS0049H)	2018 19- sem1
PayPal Chennai	1. Scheduler for making payments for charities – We built a scheduler which makes payments without Great Plains. It mainly consists of 3 major components a) Publisher - Publishes messages into the AMQ by calculating the next payout date of the given charity according to its preference and pushes the message into the queue. b) Subscriber – Subscribes the message form the queue and processes it for payment. Incase of a failure it will retry and check. After it successfully subscribes, it publishes another message for the next payout. c) Processor – Initiates payout using sendmoneyservAPI and updates all the tables in the donation, individual donation and summary tables. This helps in validation and non-repudiation of payments. For unenrolled charities, we stored the amount separately. 2. Building of Direct model – POC almost done a) Tested viable use cases and came up with a solution to use this model in countries with legal restraints of having a PPGF parent account. We have gone through the requirements and have come up with a theoretical solution to be worked upon. Tool used (Development tools - H/w, S/w): Java, Spring MVC Objectives of the project: The objective of the project is to create a payment system for charities keeping in mind the legal constraints in various countries. The project consisted of various payment models namely the Direct model and the intermediate models. Major Learning Outcomes: 1) Writing better, more readable and explainable code. I learnt that a lot of use case optimizations can be done. 2) Social and inter team building skills. Brief Description of working environment, expectations from the company: Good working environment. Academic courses relevant to the project: Java Name: Deepak Mincheri (2015A8PS0448G)	2018 19- sem1
PayPal Chennai	Built a plugin that interacts with the Control-M Automation API which is a rest API. Built an SOP for auto remediating Update statements that are part of Jobs that produce "duplicate rows" error in the source table. Built a plugin to interact with the Batch Hub (development) API which is also a REST based API. Worked on UiPath and Expect to create POCs relating to automation. Tool used (Development tools - H/w, S/w): Java with Spring Framework, SQL Objectives of the project: Create plugins for a in-house error remediation framework. Major Learning Outcomes: Getting industrial exposure in a reputed Company. Polishing existing skills and learning new skills and cutting-edge technologies being deployed in a pioneering company. Learning effective collaboration within a team and effective procedures for development of projects. Learning how experienced programmers approach programming and problem solving. Working on something that has a significant impact. Brief Description of working environment, expectations from the company: PayPal has a open office environment with flexible timings. One can pick your schedule and allocate your time to myriad number of events and activities that go on in PayPal as long as one delivers their project as expected. Academic courses relevant to the project: OOP Name: B Manish Reddy (2015A7PS0123P)	2018 19- sem1

Company	Experience	Year
PayPal Chennai	1. Scheduler for making payments to charities in PPGF model We have built a scheduler where we make payments to the charities without the involvement of the Great Planes. In this we mainly built 3 major components i.e. • Publisher This publisher publishes messages into the AMQ with the delayed time and the time delayed time is calculated according to the payment preference of the charity. • Subscriber Here subscriber picks up the message of the charity payment type, then it calls the processor with the payload of this message • Processor This is the main step in the payments, as soon as payload received then it publishes a new message into the AMQ for the next payment of the charity, and then completes the payment using the sendmoneyerv. 2. Building of Consolidated PPGF model• We have almost completed our POC where we found out the main things that have to be built by other teams, so that we can proceed with this model for our requirements. 3. Building of Direct model — • Currently we are checking with the identity team where we can create a scope and using that we can make payments to charity without going through the flow and onboarding the sellar to partner. Tool used (Development tools - H/w, S/w): java-s/w Maven framework-s/w Objectives of the project: Building a NextGen payment model for cause domain Major Learning Outcomes: I have acquired a lot of technical skills like spring framework, working with REST Api etc. One of the big take away from my internship is the ability to think from consumer, business and also form technical viewpoints Brief Description of working environment, expectations from the company: Good working environment Academic courses relevant to the project: Java Name: Yashodhar Meduri (2015A7PS0060H)	2018- 19- sem1
PayPal Chennai	The first task was to write python scripts which compared data of the API's hit rate through which the functioning of the API could be understood. The next task was to build a monitoring system for the Risk management system at PayPal. Tool used (Development tools - H/w, S/w): ReactJS, Node JS, Postman, and PayPal proprietary software. Objectives of the project: Building a monitoring system for risk domain Major Learning Outcomes: The new technologies learned, The understanding of how the big tech companies work. Brief Description of working environment, expectations from the company: The working environment is one of the best in India. There is no pressure on the interns. You learn at your own pace and set your goals with the manager helping you out. Name: Rahul Saxena (2015A8PS0306P)	2018- 19- sem1
PayPal Chennai	Worked with a team to develop an auto-remediating framework, called Optimus, to auto-resolve the failures which are dealt handled manually by Data Ops Team. Tool used (Development tools - H/w, S/w): Spring Tools Suite, AJAX, JS, Spring MVC, Expect Scripting, REST API Objectives of the project: To develop an auto-remediating framework called Optimus to auto-resolve the failures in different CDPUnits and reduce the dependence on L1 Engineers. Major Learning Outcomes: Learnt Front End development with JS, BackEnd in Java using Spring Framework, REST API. Brief Description of working environment, expectations from the company: Great Opportunity. Good Working Culture and great people to work with. Academic courses relevant to the project: Object Oriented Programming. Name: Amritesh kumar (2015A3PS0248G)	2018- 19- sem1
PayPal Chennai	The task was to first understand the entire alert generation module which includes the Alert Handing, Report Handling, Utility and Helper functions, Index and Services Call Handler modules. Once the logic and the flow of the code was known, the next step was to break the Alert and Report processor logic into different independent modules and link them to make a fully functional intent service. Once this was achieved the Quartz scheduler had to be configured to trigger the execution of the payload that was being sent by the User Interface component (The User Interface was not in the scope of my work). It was then that the query was fired to the Elastic Search and the result thus obtained was checked for threshold breach, in case there is a breach alert mail is generated and sent or else if it is the triggering time then a Report for that trigger is sent. After this part was done the platform was tested for different cases already stored in the database. Tool used (Development tools - H/w, S/w): Java MySQL ElasticSearch Node.js Apache POI Objectives of the project: The objective of the project was to build a new framework for checking threshold breach, Alert Monitoring and Report generation features with added functionality of up scalability and tolerance to failure over the earlier S. Watch tool (a tool used for monitoring the migration traffic with different processors and acquire platform) using a new java-based platform in a way that further modification is easier. Major Learning Outcomes: Learned coding practices used in the industry Got hands on working experience with ElasticSearch database Learned how professionals work in industrial environment Brief Description of working environment, expectations from the company: The work environment is very friendly with work hours being flexible. The company gives interns chance to work on projects which can also go for production. It sometimes depends on the team but mostly one can expect good projects at this company. Name: Mayank Mundada (2015A7PS0149P)	2018- 19- sem1

Company	Experience	Year
PayPal Chennai	My primary project was to develop a REST API capable of monitoring logs of any transaction API which calls it. Built a UI which invokes the REST API and creates a life cycle of the transaction from the logged data. Later I worked on designing monitoring dashbaords which extract data from PayPal's logs and displays it in a graphical manner, creates alerts if any data point has a sudden spike or drop. Tool used (Development tools - H/w, S/w): Java, SpringBoot, Oracle SQL, Maven, Python, MongoDB, Tableau, Teradata Objectives of the project: To build monitoring tools for Risk platform so that developers can address system issues quickly. Major Learning Outcomes: Object Oriented Design, Full stack development, Data Analysis and Processing Brief Description of working environment, expectations from the company: The overall work culture in PayPal was very enriching. The employees are friendly and always willing to help. All the staff and developer support teams are highly responsive and go out of their way to help the employees. Interns are treated as full time employees, and they are exposed to a very professional and systematic work environment. The projects were interesting and made me feel I am doing important work, which can actually benefit developers after I leave. Academic courses relevant to the project: CS F213 Object Oriented Programming Name: Rahul Saxena	2018- 19- sem1
PayPal Chennai	I worked in CDP( Core Data Platform) department at PayPal. Our department deals with a lot of errors daily which are currently being remediated manually by the team. Our team is in charge of building a software called Optimus that auto remediates these errors. We built a MVC Highcharts application which shows the status of these error auto remediation attempts. In addition to this we helped add pagination functionality in the Optimus UI. I also got introduced to UiPath RPA Software. We have built two JSON deserializers that parse and extract relevant data. We also got to work with Control M Automation API and built the Control M executor for the Optimus. I also worked with building the SOP for auto-remediation of Hadoop errors. Tool used (Development tools - H/w, S/w): Spring Tools Suite, UI Path, Java/Python, Javascript, Objectives of the project: Building a software called Optimus that auto remediates the daily errors that CDP team deals with. Major Learning Outcomes: Learning outcomes included getting to work with the latest RPA technology, a software called UiPath. Getting to learn the full stack web development, learning the industry standards for writing code. Learning how to communicate your work to your peers and how to work as a team on a big project. Brief Description of working environment, expectations from the company: Working environment in CDP team is pretty good, everyone is so welcoming and supportive. Once you get in a team, they treat you as full time employee and you'll receive work accordingly. If you work hard, there's a pretty good chance that you'll get good work & projects as internship progresses. I, personally, got a variety of work, worked with various softwares, thus getting a much broader knowledge of tools and softwares as compared to others. Only expectation from company is that you work hard, they won't pressure you to, but one should. Academic courses relevant to the project: Object Oriented Programming, Web Development- Full Stack. Data Structures & Algorithms (Optional, but p	2018- 19- sem1
PayPal Chennai	Galileo is a web application used to monitor alerts in a specific timeframe. It uses Reactjs at the front end and a java Spring framework at the front end. The main function of Galileo is to collect data through various sources about alerts (Exceptions) caused and group them in a specific category. These alerts are stored using a MongoDB. Thus, whenever someone makes any changes to live environment, they can observe Galileo to find various bugs they have caused and take appropriate actions. Galileo backend mainly has two sub-modules: the Data module and the Scheduler Module. The Scheduler module is responsible for collecting the alert data from various sources, categorising them and storing them in the MongoDB. Whereas the Data module is responsible for providing Rest API calls so that this data can be provided to the front end. Tool used (Development tools - H/w, S/w): Reactjs, Krakenjs, MongoDB, Java, Spring framework Objectives of the project: To give Insights and Analytics on the Alerts generated by various Components in the PayPal's Payments Department at a glance so that they might be resolved quicker and increase the overall productivity of the entire department. Major Learning Outcomes: 1) Learnt Front-End Web Develpoment using ReactJs and Querying nosql Databeses like MongoDB 2) Learnt and worked on various test tools like Spring Tool Suite. 3) Got extensive knowledge about various different components in the Payments Department in PayPal. Academic courses relevant to the project: Object Oriented Programming. Name: Pandillapalli Bhargav (2015A7PS0070P)	2018- 19- sem1

Company	Experience	Year
PayPal Chennai	Worked on Disputes API which is dispute management system for PayPal customers without logging into PayPal website every time. They can integrate Disputes API with their own API(If they have any) and can manage their disputes without reaching PayPal each and every time. During my course of internship here I was involved in various works like development (wrote code for handling ELV cases in compass), Testing and fixed some bugs as well. Tool used (Development tools - H/w, S/w): Java, Spring(Java Framework), Raptor(Specific to PayPal built on top of Spring) Objectives of the project: Provide customer of PayPal hassle-free experience in managing their disputes Major Learning Outcomes: Learned how to work with a team and how to write quality code and how to get used to professional work. Brief Description of working environment, expectations from the company: Work environment here is pretty good and I got a very good supporting team. The expectations from company are higher than what we as students of college think of. But they are not very hard to achieve. They just require a bit of dedication from our side. Overall work experience here is very good. Academic courses relevant to the project: OOP, Data Structures Name: Amit Phabba (2015A7PS0068G)	2018- 19- sem1
PayPal Chennai	I worked on an Internal tool which automates the approval process of code changes. It was a web App with the backend written in Java using Maven and Spring Boot. My contribution was focussed mainly in the front-end area where i developed a few web pages using various frameworks. Integrating various validators into the tool required a lot of orchestration between the back and front-end. I also noticed first hand the effect of a well designed site. The number of people using the site increased significantly. Also I developed a slack bot that allows users to conveniently interact with the tool. The advantages of it were clear: cross-platform support and it eliminated the need to be on a PayPal network. The results validated the above as we witnessed a substantial increase in the number of people using the slack bot. Tool used (Development tools - H/w, S/w): JavaScript, jQuery, Bootstrap, HTML, CSS, Java, Node.js, Cassandra Objectives of the project: Improving an existing web-app by adding new features and develop an associated slack bot. Major Learning Outcomes: Learnt to an Intermediate level JavaScript, Node.js, jQuery, Bootstrap Brief Description of working environment, expectations from the company: It is a truly amazing place. The people here are very encouraging and supportive. There is always a motto of "Can we do this better in some way"?. Learning new and upcoming technologies forms an essential part of your work which makes it not only fun but also beneficial. There is no perceived bias towards intern or any other employee from anyone. PayPal encourages an open working culture and so interns are encouraged to talk to other people in the organisation and learn the inner working of their departments. Living in Chennai has its own share of problems with the most significant of all being the language barrier. Most people prefer speaking in Tamil which feels a little alienating. But overall it is a great place that encourages learning and allows you to explore what you like. Academic courses relevant to the p	2018- 19- sem1
Paypal, Chennai	Part of a team which handled the launch of PayPal in India. Had to work on different aspects of product development, making small changes to existing codebase to make the products compatible for the Indian market Tools used (Development tools - H/w, S/w): NodeJS, React, Pig Latin, Pymongo Objectives of the project: PayPal launch in India Outcomes of the project: Successfully launched Major Learning Outcomes: How to approach a project, production line coding Brief Description of working environment, expectations from the company: The work environment is very amiable. The employees are ready to help you at every point of the project	2017- 18- sem1
Paypal, Chennai	Unit testing and end to end functional testing of enterprise dispute management Tools used (Development tools - H/w, S/w): Intellij ,postman Objectives of the project: Intellij ,postman Outcomes of the project: Provide dispute resolution to large merchant with best quality Major Learning Outcomes: Spring ,java8 Brief Description of working environment, expectations from the company: Working was fun. No pressure. Expectations were to push the people and make our things work Academic courses relevant to the project: OOP	2017- 18- sem1
Paypal, Chennai	Developed an ARIMA time-series based forecasting model for PayPal's merchandise gross loss. Tools used (Development tools - H/w, S/w): Teradata SQL, Microsoft Excel, Python, R Objectives of the project: To improve Paypal's accuracy for loss forecasting Outcomes of the project: Initial stage completed successfully. Needs more improvement. Major Learning Outcomes: Learnt about scientific computing in R. Improvement in DBMS skills, Business skills. Brief Description of working environment, expectations from the company: Great Opportunity. Good Working Culture and great people to work with. Academic courses relevant to the project: Operations Research Student	2017- 18- sem1

Company	Experience	Year
PaySense	Built up assets and content for the company's marketing efforts. Tool used (Development tools - H/w, S/w): Adobe After Effects, Adobe Premiere Pro, Professional grade cameras and equipments Objectives of the project: The objective of our project was to build up assets and content for the company's marketing efforts, cutting across the acquisition, conversion, engagement and retention of users. Major Learning Outcomes: Marketing principles, cinematic principles, the psychology of retaining consumers Academic courses relevant to the project: PAVA, SFVP Bangalore Faculty Name: Raja Vadhana P	2018- 19- sem1
Petasense - Embedded Software, Bangalore	Setup test environment for mbed based product. Written few firmware tests for the same product. Worked on data compression for a product called Mote to reduce data transmission time over WiFi and thus improve battery efficiency of the product. Tools used (Development tools - H/w, S/w): Greentea, Cpp, Python, Squirrel Objectives of the project: 1. Setup test environment for mbed based product to test firmware. 2. Investigate feasibility of using compression algorithm on the Mote to improve battery efficiency. Outcomes of the project: 1. Setup of the test framework is successful and been able to write tests for few modules of the firmware code and run the tests. 2. The Imp chip on the Mote is unable to handle bit level programming due to its limited resources and thus compression on the Mote is impractical as computational requirements of the Imp cover any power saving from the compression. Major Learning Outcomes: 1. Conduct research and development for a product or a feature of a product. 2. Better understanding of software development and testing. Brief Description of working environment, expectations from the company: Petasense is a small company in the IIoT space with rapid growth. In embedded field, the team is really small but top notch. Interns are expected to be playing a supporting role to the developer team with testing and conducting experiments. The overall experience in the company is amazing. Very good team. One can learn about any line of work the company does directly from the team members over personal interaction and can even contribute to the company in the field. Academic courses relevant to the project: Communication Systems Student	2017- 18- sem1
Petasense - Machine Learning, Bangalore	We had my work in various fields like web development, data analytics, machine learning etc. Primary project was related to full stack web development where we had to make the main manufacturing app for testing the product completely before it is sold to the customers. Some other project involved using ML and data analytics to detect battery anomalies. Tools used (Development tools - H/w, S/w): AngularJs, ReactJs as front end JavaScript framework. Flask Python as back end framework. Objectives of the project: To create a web application and implement a model for anomaly detection. Outcomes of the project: Successfully implemented the requirements needed. Major Learning Outcomes: Learnt a lot in the field of full stack web development and got an idea of how to implement data analytics models in python. Brief Description of working environment, expectations from the company: It's a small startup with about 10 employees in Banglore. People are very friendly and helping in nature. 5 day working per week like most other IT companies in banglore and sometimes you might have to stay a bit late than usual depending upon the load of work. Academic courses relevant to the project: Machine Learning Student	2017 <sup>,</sup> 18- sem1
Petasense - Services & App Development , Bangalore	This Project is a bunch of features in which you can be expected to work on writing APIs, managing database, creating dynamic UI components and also fixing bugs. I worked on creating a Trusted device Two factor authentication system for login, changing the Email service to sendgrid-python and creaeting multiple UI components for Webapp. Tool used (Development tools - H/w, S/w): Python, JavaScript, ReactJs, AngularJs, Flask, Celery, Robot, Cucumber, Postgresql etc Objectives of the project: Make workign APIs and UI Components as per requirements. Major Learning Outcomes: Learnt a lot in the field of Full Stack Web Development, Optimization techniques, Version control systems, HTML, CSS, Database management, writing modular code. How to manage, estimate tasks Details of Papers/patents: None Brief Description of working environment, expectations from the company: Petasense is small startup with around 12 developers in india. Employees are friendly, willing to solve doubts and are passionate about their work. You can expect a good experience with overall product design and learning to write production ready code, following best practices and being involved with all stages in development. Expect to take up responsibility of some really cool features. Academic courses relevant to the project: Computer Programming, Object Oriented Programming, Datastructures and Algorithms	2019 20- sem1

Company	Experience	Year
Petasense - Services & App Development , Bangalore	Primary project was related to full stack web development where we had to develop features as per the requirements. Their main app has its frontend written in ReactJS, D3.JS and the backend written in Flask. Tool used (Development tools - H/w, S/w): AngularJS, ReactJS, Python, Robot Framework, Cucumber, Gherkin, Celery, Postgresql. Objectives of the project: To develop web application features as per the requirements. Major Learning Outcomes: Learnt a lot in the field of full stack web development, optimization techniques, version control system, good practices to write modular code with documentation and finding out about the work process and how to manage, estimate time for your tasks. Details of Papers/patents: Brief Description of working environment, expectations from the company: Great work environment. Every member of the team is extremely approachable and eager to help. You will definitely get to work on features that are significant to the company. No matter what work you're assigned, you will definitely learn a lot. Academic courses relevant to the project: Object oriented programming, DBMS, Machine Learning Brief write-up on PS-II station: Essential prerequisite courses required before working on the project Python, Pandas, VBA, Machine learning, python, R and excel Essential Tools Required to work on the projects Python, Excel, MySQL, R List the set of on campus courses taught which were useful in executing the project Neural Networks List the set of courses not studies but might have been useful in doing the project DSA,DAA, ML, FoDS, DBMS Student	2019- 20- sem1
Petasense - Services & App Development, Bangalore	My work revolved around web-development and devops. The first project was to redesign the manufacturing app of the company. The app has its frontend written in Angular JS and the backend written in Flask. So, I had to learn these technologies and use them to redesign the app. The second project involved redesign of the backend architecture which was a monolith to a microservices based one. This involved the use of Docker for creating containers and Kubernetes to be used as the orchestration platform for the docker containers. The concept behind the microservices arcitecture, their uses, the communication between different services was something that has to be done. Tools used (Development tools - H/w, S/w): Angular JS, Flask, Docker, Kubernetes Objectives of the project: For the first project the objective was to completely redesign the manufacturing app of the company. The objective of the second project was to refactor the backend architecture to microservices architecture from the current monolith one. Outcomes of the project: The outcome of the first project was a much better, cleaner, stable and more streamlined manufacturing app for the company which led to increased efficiency of the manufacturing environment. The outcome of the second environment was that Major Learning Outcomes: The main takeaway was to actually work on these technologies in real life. Identifying points of failure, optimizations to achieve speed up in data access, using version control to make changes to a large repository, adopting best practices for software development in general were some of the key learnings. Learning about the workflow conceptualizing and planning a product, writing clean, modular code with documentation, pushing it to production post peer review and monitoring the performance to identify issues. Brief Description of working environment, expectations from the company: The working environment is highly friendly. The people don't treat you as interns but as their peers. There can be long working hours, but the amo	2017- 18- sem1
Petasense- Services & App Development ,	Worked as a full stack intern on a bunch of minor features. This involved work from developing APIs to designing and implementing the Front-end to make use of it. Aside from that, I worked on improving an algorithm for predictive maintenance of industrial machinery. Tool used (Development tools - H/w, S/w): JavaScript, AngularJS, PostgreSQL, Python, Celery Objectives of the project: Several minor features for the company's web application, Improve results of outlier detection algorithm for predictive maintenance Major Learning Outcomes: Programming practices, Full Stack Development, Machine Learning in the domain of Vibration Analysis Details of Papers/patents: Not applicable Brief Description of working environment, expectations from the company: Great work environment. Every member of the team is extremely approachable and eager to help. You will definitely get to work on features that are significant to the company. No matter what work you're assigned, you will definitely learn a lot. Academic courses relevant to the project: Object oriented programming Name: Sahil Kumar (2014B4A40555P)	2018- 19- sem1

Experience Year Company My first project was designing and implementing automated functional tests which would be written for all APIs while development and run everytime before deployment to catch regression bugs. After that, I was assigned a set of tasks time to time which require some design, design review and backend implementation. I was more involved with security and User facing features like User Signup, Site Management features, Password History enforcement, Role Based Access Control etc. There were other small tasks at times (1-2 days of work) along with two separate projects. One of those was implementation of Petasense manufacturing app (a separate microservice) for Gen2 sensors. Tool used (Development tools - H/w, S/w): Robot Framework, Flask Objectives of the project: 1). Design and implement automated functional tests; 2). Site User Management changes as per requirements Major Learning Outcomes: Backend flow and design - various stages in designing and developing a feature for user. Programming for 2018-Petasense-Services & App development purpose as opposed to competitive/problem solving. Brief Description of working 19environment, expectations from the company: it's a small startup and there are very less number of Development, sem1 people working with you which gives you an opportunity to own the task in hand and design it in the way you wish, which is good for learning design aspects. With regard to learning, you can ask for help from anyone but there is a limit to what you'll be learning that way. Don't expect too much of technicality or possibility of writing good algorithms or advanced structures (it's python based web development and most things you'll do are already been implemented as a library or tool). You can expect a good experience with overall product design and learning to write production ready code, following best practices and being involved with all stages in development. You can also expect working on many cool project which comes along your way time to time as startup grows. Academic courses relevant to the project : C Programming, DSA, Cryptography, DBMS(Not taken), Networking(Not taken), OOP(Not taken) Name: Rishabh Gupta (2014B4A4081P) Primary project was related to full stack web development where we had to develop features as per the requirements. Their main app has its frontend written in ReactJS, D3.JS and the backend written in Flask. Tool used (Development tools - H/w, S/w): AngularJs, ReactJs, D3 as front end JavaScript framework. Flask Python as back end framework, Robot as testing framework Objectives of the project: To develop web application features as per the requirements. Major Learning Outcomes: Learnt a lot in the field of full 2018-Petasense- Services & App stack web development, optimization techniques, version control system, good practices to write modular 19code with documentation and finding out about the work process and how to manage, estimate time for Development, sem1 your tasks. Brief Description of working environment, expectations from the company: It's a small startup with about 15 employees in Bengaluru. People are very friendly, passionate about their work and helping in nature. They won't treat you as interns but as their peers. There will be working hours as per the situation but if you are passionate enough to learn you won't mind that. Academic courses relevant to the project: DSA, OOP, DBMS, Machine Learning Built the Weekly Status Report Module (WSR) for Upshot.ai, which shall let the clients view 4 of their key parameter's progress that week, along with some other predefined parameters. Also, customize those key parameters, Select the notification recipients for a new Report and download any report in PDF format to local computers. Tools used (Development tools - H/w, S/w): PHP, YII framework v1.1, JQUERY, HTML-CSS, PhantomJS, AJAX, Python, MongoDB Objectives of the project: To Create a Module that let's user define/select key parameters and sub parameters to visually represent progress on them per week, and customize the receivers of alerts when a new report is created. Outcomes of the project: The project was 2016-Pilani Experts Technology successfully designed, coded and integrated with Upshot.ai. Major Learning Outcomes: Learnt how to work 17-Labs Pvt Ltd , Bangalore with various individuals from different teams like design, Backend, etc. and chalk out the course of action sem1 for the completion of the project. Learnt all the languages/tools required for the completion of the project. Brief Description of working environment, expectations from the company: The work was challenging as I was supposed to learn and implement the project pretty much on my own, with help from others. My Mentor and Project Manager were extremely understanding and helpful. The people I worked with were helpful too. Although the work is hectic for beginners and they are expected to learn and implement the task within a very challenging timeframe.

Company	Experience	Year
Pilani Experts Technology Labs Pvt Ltd , Bangalore	This project contains insight into natural language processing, Microsoft bot framework. It outlines the ways to use and integrate the NLP framework api calls into a bot. It gives report on the techniques to create a bot that uses NLP calls, Solr search, Chatterbot. It also stresses on the authentication of Google and Outlook web api's. (OAuth2) Tools used (Development tools - H/w, S/w): Python, Pyspark, Microsoft BotFramework, Wit.ai, Api.ai, Google developer Api Objectives of the project: The main objective of my project is to build a chat bot that interacts with users and implements services like creating events and booking cabs. Outcomes of the project: My main output from this project is my new proficiency with python and pyspark.I also got a greater insight into natural language processing and different implementations of api's using REST api Major Learning Outcomes: During the five and half months of internship at PurpleTalk, I have developed a core understanding of the need for Bots. Through this project, I got a in depth insight into building a huge project as well as working with available bot frameworks. I also got a greater insight in calling different api's and using frameworks like Django, flask in python. I also got well versed with various machine learning algorithms and data manipulation in Apache Spark I also look forward to integrate more Natural Language Processing and Machine Learning into the Bot. Brief Description of working environment, expectations from the company: The working environment is extremely friendly and responsive to our queries. The expectations are nothing beyond normal and are very receptive to our queries regarding our capabilities. Student	2016 <sup>-</sup> 17- sem1
Pilani Experts Technology Labs Pvt Ltd, Bangalore	Worked as a marketing and operations intern at the early stage startup. My work involved digital marketing, operations and sales. Designed marketing creatives and product features. Tools used (Development tools - H/w, S/w): Slack, MS excel, Hootsuite, heap analytics, mix panel, grapelli Objectives of the project: To scale key metrics of the organization Outcomes of the project: Scaled user growth and transaction metrics 5x in 6 months Major Learning Outcomes: Primarily learnt the working of an early stage startup Brief Description of working environment, expectations from the company: Work environment is extremely fast paced. Learning curve is steep and enjoyable	2016- 17- sem1
Pilani Experts Technology Labs Pvt Ltd, Bangalore	Social Media Marketing strategy is a quintessential element in the growth strategy of any early stage startup. In today's market where social media channels are one of the busiest mediums a proper social media marketing strategy is something any startup cannot do without. Tools used (Development tools - H/w, S/w): Hootsuite, Medium Objectives of the project: The objective of this project is to develop a social media and content marketing strategy for Tap Chief to ensure social media presence, branding and customer outreach. College Approach Social Media Approach Sales and Marketing Outcomes of the project: The social media strategy has been helping us build a great brand on social media and the following has increasing constantly, due to the new content campaign. The college approach has been getting great results as we are able to track the number of time each mail has been opened because of the tracker we incorporate in the mail. Major Learning Outcomes: Exposure to a fast-paced Startup environment. High degree of professionalism. Friendly work culture Team work Latest trends and tools being used in the startup environment Brief Description of working environment, expectations from the company: The progress in growth strategy has been good. The implementation has started along with the management and execution is also on. We are planning to try and improvise some of the growth strategy to experiment and see if it effects the results by visiting some colleges to conduct seminars. Student	2016- 17- sem1
Piramal Group , Mumbai	A bank statement analysis procedure was required by the team at Piramal. Some existing methods generated by an outside vendor were used, and other new methods were generated. Using these rules, a fraud detection model was created by building frequency variables and scoring applicants on it. Other projects on account reconciliation, report summarisation and duplicate payment detection were done. Tool used (Development tools - H/w, S/w): Pandas, Fuzzywuzzy, Pandas, Excel Objectives of the project: Fraud Detection using bank statement analysis Major Learning Outcomes: Domain knowledge of banking, data analysis, fuzzy logic Details of Papers/patents: NA Brief Description of working environment, expectations from the company: Office timings were moderately flexible. Total of 9 hours work in a day was expected from every person, but there was some flexibility in the time of entry and exit. The team was helping and motivated. Academic courses relevant to the project: Foundations of Data Science	2019- 20- sem1
Piramal Group , Mumbai	Mostly automation work using python, VBA and Microsoft excel. There was one very small analysis project. You just need to know one library of python, watch one course of VBA from coursera and you can do the work. Tool used (Development tools - H/w, S/w): Python, excel and vba Objectives of the project: Make a tool which takes some excel sheets as inputs and outputs some excel sheets Major Learning Outcomes: VBA in Microsoft office. Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: Good working environment. You will learn how to deal with clients. Flexible hours are there but you need to work 9hrs a day. Academic courses relevant to the project:—	2019- 20- sem1

Company	Experience	Year
Piramal Group , Mumbai	Projects related to Data Analytics were allotted. In my first project I had to cluster Strings into groups and find a pattern in every bucket. I used Affinity Propagation and Edit distance. I also built a Random forest classification model to detect frauds early on by using their Application data. Another project required me to build a Neural Network from scratch to classify receipts into various buckets. I also did a project to automate resource allocation optimally. In all of these projects I had to do data preparation, Model selection, Optimisation of the model and thorough analysis of the results. I got a good experience of how Data scientists do their work in the real world. Tool used (Development tools - H/w, S/w): Python, Excel, XML Objectives of the project: 1) Clustering of strings using ML 2) Fraud detection model using ML 3) classification of Strings using Neural Network 4)Optimal Resource allocation Major Learning Outcomes: How to build, select and optimise ML models. Data Preparation, Feature selection and Analysis of the results Details of Papers/patents: Brief Description of working environment, expectations from the company: The working hours are flexible as long as one works for 8+ hours. The Managers and Mentors are very helpful and knowledgeable. They were very professional and guided me well. They were friendly and were understanding whenever I had a problem outside of the office. The Office is well lit with Natural light and we all get our personal work station. Academic courses relevant to the project: ML, FoDS, DSA, DBMS, OS, Programming with C Student	2019 20- sem1
Piramal Group, Mumbai	I worked with the data analytics of Piramal Corporate Services Limited. The aim of the team is to create impact through data, across all the businesses of Piramal Enterprises, Piramal Corporate Services and Piramal Foundation. With the ultimate motive of an analytics driven firm, the team coordinates with the strategy team to develop business models and strategies. I actively worked with Piramal Realty, Piramal Housing Finance, Piramal Construction Finance, Piramal Foundation and the Financial Operations team. The project with the Housing Finance team dealt with credit fraud detection model. There is a constant threat of delinquencies and bad debt in the lending business. The idea was to raise early warning signals for applicants and reduce the traditional overwriting process, for smoother and unbiased lending. The other project dealt with mid-market construction finance, finding potential buyers and improve sourcing. The idea was to create inhouse city specific databases, and using analytics and historical data, determine the best potential targets in the market. There were also a couple of initiatives to reduce turnaround time: Namely PPT Automation tool. The operations team spends multiple hours creating presentations for the deal clearance committee. With the help of this tool they can save lots of time, and focus more on the insights part. Tool used (Development tools - H/w, S/w): Spyder-Python, VBA-Macros, RStudio, Excel, Powerpoint Objectives of the project: 1) Improve mid-market sourcing for CF team: 2) Raise early warning signals for potential credit risks and follow up with account monitoring Major Learning Outcomes: Business Knowledge, Case solving ability, Data Science and working with data Brief Description of working environment, expectations from the company: Working environment was good. Friendly environment, highly experienced people. Helped us develop ourselves before stepping in the industry Name: Anukriti Gupta (2014B2A80584P)	2018 19- sem1
Piramal Group, Mumbai	The work here is in the analytics division. It requires sound knowledge of python and excel for business. We learnt how to process the data and extract meaningful information from it. Here the analytics team at Piramal is non profit organisation created a year ago which caters to the other businesses of Piramal Group. There are projects from the Piramal Housing and Capital Finance, Piramal Reality, Piramal Critical Care, Piramal Foundation. I firstly worked on the current portfolio of the entities who have taken loan from Piramal Finance. The credit risk and rate of default was calculated and the opportunities to increase the wallet share were identified. Later i worked on Piramal Critical Care Report Automation Tool. The reporting of PCC creates reports in excel and there is a lot of manual work which goes behind it which is time consuming. I generated a Automation tool which processes the given file, creates them in same format and then generates the final report. With this the manual effort has been reduced and the file gets generated within few minutes. Tool used (Development tools - H/w, S/w): Spyder, Python, Microsoft Excel Objectives of the project: The main objective of my project was to automate the whole reporting task done by the reporting analyst which is time consuming and includes a lot of manual error. So I created a Reporting tool in which, when one selects a file he wants to process, it is checked first and then correspondingly output is obtained just by click of the button. Major Learning Outcomes: A sound knowledge of python and excel is developed. I have learnt how to process data and extract meaningful results from it. Brief Description of working environment, expectations from the company: The team is newly made, enthusiastic people, passionate towards working and really supportive. They have guided me throughout my journey of practice school and were a constant support. The working environment which helped me learn the nuances of the tasks at hand. Name: Nikhil garg (2015A3SP0142G)	2018 19- sem1

Experience Year Company I initially wrote a Python script for combining different data sets generated by housing finance division and then move to analysis of the data. A reporting framework was put in place for daily monitoring of lead activity across the ecosystem. Further a target customer profile was generated which was used to develop a Call centre Prioritisation Logic and used by marketing team. A scoring model was created using a variant of Google Page Rank Algorithm for projects and channel partners across Mumbai to increase list of approved projects and increase reach among channel partners. Finally a Campaign Scorecard has been modelled basis campaign attributes and online Ad bidding process for monitoring and generating performance indices. An advanced excel based dynamic dashboard has been generated for campaign 2018performance visualisation. Tool used (Development tools - H/w, S/w): Python, Excel, Tableau, Google 19-Piramal Group, Mumbai Analytics Objectives of the project: Generating performance indices and reporting framework for Digital sem1 Marketing Data Major Learning Outcomes: Python Programming Skills and Knowledge of Advanced Excel. Working Knowledge of Google Ad Words and Google Analytics. Business knowledge of Digital Marketing. Brief Description of working environment, expectations from the company: A very diverse team with people from different academic backgrounds and experience of working in data analytics. A helping environment with proper guidance and support for developing analytical thinking and understanding integration of business knowledge and critical thinking into planning. Constant feedback and suggestions from senior members on areas of improvement. Academic courses relevant to the project: Neural Networks and Fuzzy Logic, Machine Learning Name: Abhinav Goyal (2015A8PS0497H) Piramal Foundation, Piramal Group's philanthropic arm, drafted a new communications team with the objective of creating awareness among the masses about the foundation and its various initiatives including Gandhi Fellowship, Sarvajal and Swasthya. Social Media would play a major role in achieving this objective and hence the project was allotted to our team, given the recent impact of tools and analytics in the marketing industry. The handles on Twitter and Facebook had been relatively inactive since their creation and the follower base had been meagre compared to industry leaders and benchmarks. Hence, the first step of the project was to understand and study how Twitter and Facebook's algorithms worked, the content shared by benchmark organizations, industry practices in non-profit sector and the types of posts and content which resonated more with the Indian audience. The analysis involved data gathered from books, articles, interviews, historic post's data from benchmark handles and our own handles using API's and freemium tools. The project lasted over two months and tools developed by the team are 2018-Piramal Group, Mumbai currently in production, diligently utilized by our partners and improving daily based on their feedback. At 19the end of our project, our team delivered various frameworks and tools to our partners, which are flexible sem1 and scalable for other industries. Tool used (Development tools - H/w, S/w): R, Python, Excel and VBA Objectives of the project: Social Media Analytics Major Learning Outcomes: Social Media Analytics and designing relevant strategies, Designing various tools such as an Online Reputation Management tool, Automation and reporting, Data collection through crawlers and APIs. Brief Description of working environment, expectations from the company: The team was extremely supportive with our work and made sure to involve us at each step of the way. I was encouraged to lead live projects, under mentorship from senior employees, and present my work and results to the top level management, from CEOs to group presidents and department heads, which helped me develop confidence in my skills while learning from their constructive criticism. Our contribution and ideas were valued by the team at every step. Academic courses relevant to the project: Database Systems, Data Mining • Storage and Warehousing of PLOT-14, Bawal. I would explain in detail about the storage and warehousing plan for Celsure Production, its Raw Material (RM) and Finished Goods (FG). • Process Intensification for HS and FS pouch production line I would explain the current process for pouch filling and some improvements which can be made to increase its efficiency. • Thermal Analysis of the Celsure Box I would explain the theoretical thermal analysis of the Pallet Shipper and further work which we plan on conducting for the same. Tool used (Development tools - H/w, S/w): ANSYS Workbench, Sigma Mixer, Planetary Mixer, Extruders etc Objectives of the project: Mutiple projects were undertaken. Major Learning Outcomes: I learned about PCM and its application, as well as simulation models. Brief Description of working 2018-**PLUSS Advanced** environment, expectations from the company: The people and managers are hospitable and provide their 19-**Technologies** utmost support. The physical resources that are available for experimentation, at times, pose some sem1 problems but this itself makes the job all the more interesting. I got to undertake many different projects with relative ease hence making this a worthwhile learning experience for me. Academic courses relevant to the project: Material Science, Heat Transfer, Thermodynamics, Transport Phenomena Tool used (Development tools - H/w, S/w): Postman, VScode, SailsJS, ReactJS Objectives of the project: Worked on various automation projects like billing monitors, realiability reports, and intergrations for paid users. Major Learning Outcomes: Learnt how to write scalable and production ready code. Name: BAIREDDY BHARATH REDDY (2015A7PS0025H)

Company	Experience	Year
Postdot Technologies, Bangalore	Worked on the Data validation framework which will check the sanity of the Redshift Tables . Worked on Workable API integration in Postman to notify the interviewers who have not posted any Ratings on the Candidates they have interviewed recently Tool used (Development tools - H/w, S/w) : Postaman App, SQL, Javascript, Python Objectives of the project : Required for keeping Redshift tables in check in terms of data and To use Workable API's to automate Hiring Process Major Learning Outcomes : 1) Learned about Postman collection and worked with them using monitors 2) Had a great exposure to Object Oriented Python and unit testing in Python. 3) worked on writing SQL queries and Javascript. 4) Worked on tests in Javascript. 5) Learned how to use different API's to solve real world problems like in Workable integration in Postman. Brief Description of working environment, expectations from the company : Postman as an api startup company need students with skills related to Software Development, API development cycle, need students worked on Node platform in the colleges, should have known about Amazon Web Services, known about React.js before coming to join postman company. Postman required more skilled persons in all the areas of software development. As the BITS cirriculum does not provide all the above stated requirements, students should learn all these before joining postman as an PS-2 intern. Academic courses relevant to the project : DBMS (SQL) Name : Ajay Dirisala (2015A7PS0028H)	2018- 19- sem1
Postdot Technologies, Bangalore	I was a part of Data Science team. I worked on various projects like forming user clusters, predicting the behaviour of users. Tool used (Development tools - H/w, S/w): AWS, SQLWorkbench, SQL Objectives of the project: Prediction of users whether they're going to buy the product or not Major Learning Outcomes: SQL, Python Academic courses relevant to the project: DBMS, ML Name: PAVAN TEJA POTNURU (2015A7PS0007G)	2018- 19- sem1
Postdot Technologies, Bangalore	Postman app is used through out the development process of an API. My project was to develop an import plugin to import external Api specifications like OpenAPI specification into Postman app. OpenAPI Specification, originally known as the Swagger Specification, is a specification for machine-readable interface files for describing, producing, consuming, and visualising RESTful web services. I also developed an import endpoint for Postman cloud api. Through this api endpoint one can import external api specifications like OpenAPI into Postman app using access_token auth. I also successfully completed some small tasks which are useful for company in their development process: 1) X-ray_to_Looker: A Postman collection to move service-service traces from AWS X-ray to Looker. 2) Windows support for Travis builds on GitHub modules. Tool used (Development tools - H/w, S/w): Node.js(MVC framework), AWS X-ray Objectives of the project: Developing an OpenAPI import plugin for Postman app and an import endpoint for Postman cloud API. Major Learning Outcomes: Learnt Node.js, MVC architecture, API. Brief Description of working environment, expectations from the company: Great working environment with many opportunities as the company is expanding in various fields.	2018- 19- sem1
Pricewaterhouse Coopers	My client was Inland waterways authority of India. During the initial phase of the internship my focus was majorly on the conduction of pilot movements for IWAI in Nw1 and Nw2. For this we read a report prepared by HPC and E&Y and noted all the commodities which could be moved on waterways. Then by secondary research, traders, dealers and manufacturers of those commodities were noted and they were contacted through primary phone calls for conduction of pilot movements. Various factors were asked during the phone calls including cargo quantity, O-D pairs, current cost, first and last mile etc. Interested companies were further entertained by meetings for further processes. The next phase of my project included IWT research on global level. Countries like USA, China, Netherlands has a more developed waterway system, hence they were studied and the key success factors were noted which may be implemented on Indian waterways by IWAI in near future. Tool used (Development tools - H/w, S/w): MS-Powerpoint, MS-Word Objectives of the project: To conduct pilot movement and to find out success factors of IWT worldwide. Major Learning Outcomes: Got familiar with various waterway terms and systems. Learnt about various types and sizes of vessels in India and abroad and types of cargos moving in them. Got hands on experience on of the market scenario for waterway transport in India. Academic courses relevant to the project: Hydrology, Construction planning and technology. Name: Naga Dheeraj Dogiparthy (2015A2PS0595H)	2018- 19- sem1

Company	Experience	Year
Pricewaterhouse Coopers	As a part of first phase of karnataka wastewater reuse policy implement drive, Karnataka Urban Water Supply& Drainage Board appointed PwC Bangalore as one of the consultant to identify potential reuse projects across the state, shortlist three projects, and prepare a detailed report including Pre-feasibility for these priority projects. The focus of the assignment is to identify the demand for use of secondary treated municipal sewage to meet industrial demand and possibly generate new revenue streams for the Board by implementing these projects across the state. Tool used (Development tools - H/w, S/w): GIS, PMER frameworks etc. Objectives of the project: Objectives include shortlisting 8 cities in Karnataka to study water reuse potential. Further recommend 3 projects to the Board for conducting pre feasibility. After narrowing the 3 cities, PPP model and Pre-feasibility along with transaction process is to be done. Major Learning Outcomes: 1. Engagement with different stakeholders for the project. 2. Different problems associated with various STP technologies 3. Possibilities for reuse of treated wastewater 4. Business development- bidding, proposals Brief Description of working environment, expectations from the company: PwC Bangalore offers great working environment in the office. My line of service is GRID> PS&G (Public sector and governance) which involves lot of field work. You will work at the client site more than in the PwC office (depends on the project). Company doesn't expect much, good content writers are appreciated well. Creative and logical thinking is all you need as a pre requisite. Academic courses relevant to the project: Water and wastewater engineering, Construction Planning and MGMT. Name: Manish Chandra Yadavalli (2015A1PS0725H)	2018- 19- sem1
Pricewaterhouse Coopers	The work done here mainly consists of consulting in oil and gas sector. This includes conducting market researches, benchmarking studies and business development. Tool used (Development tools - H/w, S/w): Microsoft office, Financial and Business analysis Objectives of the project: To get an idea about the market for the product, To conduct a benchmarking study, to analyze the business plan of the company and contribute to its development Major Learning Outcomes: Proficiency in MS Office, Increased proficiency in soft skills and presentation skills, Business analysis, Market Research. Academic courses relevant to the project: Fundamentals of Finance and Accounting Business Analysis and Valuation Name: Dikshant Agarwal (2015A3PS0206P)	2018- 19- sem1
Pricewaterhouse Coopers	Worked on a project which has a objective of comparing the FiT and auctions in renewable energy market in global scenario Tool used (Development tools - H/w, S/w): Microsoft excel Objectives of the project: Comparison between FiT vs Auctions in renewable energy market in global scenario Major Learning Outcomes: Dependency on difference situations Academic courses relevant to the project: Financial Management Name: Shivam Mahajan (2012B4A20702H)	2018- 19- sem1
Pricewaterhouse Coopers	PwC India is assisting Airports Authority of India (AAI) in the Preparation of a Detailed Project Report (DPR) of Kalay Airport, Myanmar. The main purpose of the project is to evaluate the potential of the airport for feasible commercial operations. I was introduced to the project and practices to be followed for the same and have since then been working with the team to achieve the deliverable. I have worked on various sections of the project involving Traffic estimation, Cargo Potential and Cost Benefit Analysis. Tool used (Development tools - H/w, S/w): Microsoft Excel, Power point, STATA Objectives of the project: An in depth Feasibility study of the proposed Airport was required to achieve the broad objectives: Firstly, to increase trade and connectivity of Myanmar with India and the world. Secondly, to add new dimension of multi modal connectivity in western Myanmar and thirdly, to increase proximity to the upcoming major trade and economic corridors. Major Learning Outcomes: Throughout my engagement I have learned the various constituents of Feasibility Analysis and learned the various variables and methods of analysis to be industry-ready. Development of formal presentations and Reports was a considerable part of my engagement with an in-depth knowledge of the aviation sector of India and the World. Brief Description of working environment, expectations from the company: The project is my first experience in working for a well renowned MNC. I am fortunate to be a part of a team which is bound by tough deadlines as it is helping me to be responsible and efficient at the same time. I am thankful to my mentors for providing me the exposures to the various practices of the company. The expectations in my mind at the start of my engagement have truly been met. Academic courses relevant to the project: Many courses taught at BITS Pilani helped me during my engagement in this project. The most important ones were: Probability and Statistics, Algebra II, Discrete Mathematics, Fuzzy Logic, Mathematics III	2018- 19- sem1

Company	Experience	Year
PricewaterhouseCoopers (PWC) , Gurgaon	Consultation on Government Projects. The work was more concentrated on secondary research and data analytics. It comprises of rigorous analysis on upcoming government projects in railway stream and providing consultation on traffic and financial accessibility of the project Tool used (Development tools - H/w, S/w): MS Excel and MS Word Objectives of the project: The projects included traffic study and its future profit to the government organisation (railways in person). The project also included providing consultation on financial accessibility to the projects Major Learning Outcomes: Some of the major outcomes included the understanding government dealings. Shear understanding of the corporate world and professionalism included. Understanding on how top consultancies work throughout the world Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is quiet decent. The team in which I worked was very supportive. They understood the problems that are faced by a an engineering undergraduate and helped me a lot in understanding the work culture Academic courses relevant to the project: Airways, Railways, Waterways	2019- 20- sem1
PricewaterhouseCoopers (PWC) , Gurgaon	Different Projects I have been a part of during my PS-2 are: 1) Made a tool using VBA programming in excel which reduced the time to make project CV by 95%. 2) Developed a Market Entry Strategy for a Oil Company 3) Did a Financial Feasibility Analysis for a proposed Company 4) Did Market Demand Assessment for a Company 5) Developed a Gas Market Strategy for a European Country Tool used (Development tools - H/w, S/w): Microsoft Excel, Microsoft PowerPoint, Optimization Tools Objectives of the project: Client Deliverables Major Learning Outcomes: Decision Making skills, Strategy making, Time Management, Teamwork Details of Papers/patents: Brief Description of working environment, expectations from the company: Work Environment is very Positive. You need to be Proactive and initially interact with everyone to get yourself involved early in a project. If you prove that you are dependable and accountable then you will get to work on Live projects also that are going on in the team. You will also get to be the part of Client Meetings where you can directly interact with the client. You will also get to travel a lot to different PSU's where again you will get a chance to Interact with People. PwC Gurgaon is a Front End Office unlike other consulting firms in the same building. In the same building, you will find people from BCG, BAIN, KPMG, Deloitte and if you are an extrovert you can get benefitted from it. Academic courses relevant to the project: Supply Chain Management, Engineering Optimization, Fundamentals of Finance & Accounting, Business Analysis and Valuation, Derivatives & Risk Management Student	2019- 20- sem1
PricewaterhouseCoopers (PWC) , Mumbai	I was part of 2 projects. One was based on Thought Leadership and the other was a client-site project. During the initial days, lots of research work was done for collecting the data from reliable sources. Excel model was made by me to analyse the results. The client-site project was of Management Consultancy background. I made some excel tools for the client which will be used by them throughout their offices across the country. Tool used (Development tools - H/w, S/w): Ms-Excel, Ms-Powerpoint, Excel Solver and ThinkCell Objectives of the project: Comparative cost analysis of different modes of transport technologies and arriving to the result that which technology will be successful by what time and in which states of the country. Major Learning Outcomes: Soft skills developed- Advanced excel with VBA coding and macros. Presentation skills- due to regular exposure with client, deliverables had to be presented frequently. Analytical skills- The amount of data which was to be analysed was humongous. Details of Papers/patents: Brief Description of working environment, expectations from the company: PwC is one of the 'Big Four' company hence professionalism in the work environment can be expected which even reflects when you join them. The employees are friendly and always ready to help and guide you. In return, the expectations from you is dedication, quality ouptut and commitment. Academic courses relevant to the project: None. The only thing expected from you is a strong thought process on how you tackle the real life problems. Student	2019- 20- sem1

Company	Experience	Year
PricewaterhouseCoopers, Bangalore	The project was about the market analysis of Electric Vehicles and their future prospects. In the first part of the project I studied the EV market both India and Global. I studied about the various trends seen in different countries and the various policies different governments have adopted to promote the use of EVs. I studied the different types of business models adopted by the EV manufacturers. Since EV market is still in a nascent stage in many major markets there are various standards that exist for charging the EVs. All the charging standards were studied and compared. Indian EV market is lagging behind its global counterparts. The various reasons for this were identified and some remedial measures were suggested. Then I studied the vehicle trends in Bengaluru and predicted the number of vehicles to be expected in the city by 2030. Then under different scenarios this prediction was used to estimate the number of EV to be expected in Bengaluru by 2030. Then I made a financial model for an EV charging station. The CAPEX and OPEX for the charging station were calculated. The financing for the CAPEX was also suggested. Finally a levelized tariff was calculated for the EV charging station. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Electric Vehicles - Market Analysis and Future Prospects Major Learning Outcomes: Financial Modelling Academic courses relevant to the project: Fundamentals of Finance and Accounts, Financial Management, Electric Machines, Power Systems Name: Kunal Malavia (2014B2A30948G)	2018- 19- sem1
PricewaterhouseCoopers, Bangalore	Researched and prepared a solution oriented by blockchain technology for the energy industry. PwC provides consulting services in energy sector and was looking new solutions to pitch to its clients using the modern day technologies of blockchain, artificial intelligence and machine learning. I thoroughly researched on the blockchain technology and used my understanding to transform the existing operations in energy industry. Tool used (Development tools - H/w, S/w): MS-Word and MS-Excel Objectives of the project: Design solutions based on blockchain technology. Brief Description of working environment, expectations from the company: The work culture is very dull. The team lacked coordination and team working spirit. There is a lack of coordination within the team and a lot of irregularities in the flow of work. Name: Abhay Malpani (2015A2PS0798P)	2018- 19- sem1
PricewaterhouseCoopers, Bangalore	I was allotted the project on the next day of my joining. The consulting assignment was in the domain of Public Sector and Governance (PS&G). The project was to do prefeasibility study for wastewater reuse opportunities in three cities of Karnataka. The client was Karnataka Urban Water Supply & Drainage Board (KUWSDB). The project involved meeting various stakeholders, industrialists and municipal council bodies, also included travelling to various towns in Karnataka for data collection. At last report making and preparing presentations are the mandatory tasks involved. Tool used (Development tools - H/w, S/w): MS Word, MS Excel, MS Powerpoint Objectives of the project: Conducting prefeasibility studies for wastewater reuse opportunities in three cities of Karnataka Major Learning Outcomes: Project Outcomes - Water scarcity scenario and wastewater reuse methods and techniques Skills - Communication and Presentation skills Brief Description of working environment, expectations from the company: The work will be based from client office/site. Don't expect to work feom lavish company office when working on a project with client. So in a nutshell your working conditions depend on your client and your manager Academic courses relevant to the project: Water and wastewater treatment	2018- 19- sem1
PricewaterhouseCoopers, Chennai	Worked with the PMC(Program Management Consultant) team of PwC for CSCL (Chennai Smart City Limited). Assisted the client in execution and implementation of the smart city projects. This included drafting and editing EOIs (Expression of Interest) and proposals, literature review, secondary research, field studies, presentations, meeting key officials, conducting workshops and writing reports. Tool used (Development tools - H/w, S/w): Microsoft Office, Google Maps, Adobe Photoshop Objectives of the project: To help the Greater Chennai Corporation and the Chennai Smart City Ltd in managing, executing and implementing the smart city projects. Major Learning Outcomes: Improved Presentation Skills, Communication skills, knowledge on PPP projects and funding, Information handling. Brief Description of working environment, expectations from the company: The work environment is good, and the team members were absolutely amazing. I mainly worked out of the client site and worked out of the PwC office only for a few days in the initial phase. The colleagues there were helpful too and ensured a smooth transition into the system. The working hours are moderately flexible too. They expect you to think out of the box and come up with innovative solutions. But the brainstorming sessions and inputs from senior consultants significantly reduce the workload. Academic courses relevant to the project: Highway Engineering, Business Analysis and Valuation, Technical Report Writing. Name: Rohan Goyal (2015A2PS0496P)	2018- 19- sem1

Company	Experience	Year
PricewaterhouseCoopers, Chennai	Worked with Chennai Smart City ltd.which included various projects like developing a financial model for sports facilities and a sports complex, preparing a Detailed project report for parking demand assessment and Model and Smart Corporation Schools in Chennai and Expression of Interest for place-making of 22 major roads and literature study of various amusement parks around the world as part of a project in kerala Tool used (Development tools - H/w, S/w): Excel, Word and Power point Objectives of the project: Sustainable and inclusive development and look at compact areas and create a replicable model Major Learning Outcomes: Preparation of Detailed Project Report, Request for Proposals and Financial models Academic courses relevant to the project: Fundamentals of Finance, Construction Planning and Technique	2018- 19- sem1
PricewaterhouseCoopers, Gurgaon	I got the opportunity to work on the following projects: 1. Piloting rapid uptake of industrial energy efficiency in Zimbabwe 2. Resource efficiency for SME's of Food and beverage sector in Cambodia 3. Recognizing opportunities and challenges in skill development of EV sector in India 4. Verification of the biggest energy efficiency program in India for retroactive financing of USD 55 million by World Bank. 5. Developed a "Go to market strategy for Battery energy storage systems" That being said, the work that I did should not be an expectation for anyone. This is because the work which each student will get will depend on the team, the time he is joining the company and the kind of clients which the team has at that point of time Tool used (Development tools - H/w, S/w): 1. Microsoft PowerPoint 2. Microsoft Excel 3. Microsoft Word 4. Microsoft Visio Objectives of the project: 1. Piloting rapid uptake of industrial energy efficiency in Zimbabwe 2. Resource efficiency for SME's of Food and beverage sector in Cambodia 3. Recognizing opportunities and challenges in skill development of EV sector in India 4. Verification of the biggest energy efficiency program in India for retroactive financing of USD 55 million by World Bank. 5. Developed a "Go to market strategy for Battery energy storage systems" Major Learning Outcomes: 1) Got proficient in tools like Microsoft PowerPoint, Microsoft Excel, Microsoft Word & Microsoft Visio. 2) Problem solving 3) Technical knowledge about energy sector & electric vehicles 4) Got acquainted with consulting culture. Brief Description of working environment, expectations from the company: Will vary depending on the team you are a part of. Each person will have a unique experience depending on the team he is a part of and the kind of project he will work on Academic courses relevant to the project: Financial Management Name: Rishabh Gupta (2015A2PS0735P)	2018- 19- sem1
PricewaterhouseCoopers, Gurgaon	My project was related to the upgradation of State road network (financial/ commercial side). Initially the work included comprehending various reports which provided the background as well as the current status of the project. Further role included the side of financial development in relation to the upgradation of roads. It included the revenue analysis of the state government and ways to increase the collected revenue which could be channelized for the upgradation of roads. Various taxes by the govt. were worked upon and ways to increase the revenue through taxes were analysed. Several financing schemes were analysed relevant to the scenario of road upgradation. Also, several innovative (non-traditional) financing mechanisms were also analysed and monetized for the govt. for the upgradation of road network. Tool used (Development tools - H/w, S/w): MS-Word, MS-Excel, MSPowerPoint Objectives of the project: Financial assessment, revenue analysis, road upgradation innovative financing, Medium Term Financial Plan (MTFP) Major Learning Outcomes: Knowledge of government financing, professional ethics, report and presentation making, client site exposure Brief Description of working environment, expectations from the company: The working environment is quite good and professional. The infrastructure as well as the overall culture (including the crowd) is nice. Expectations from the company would broadly include the will to learn, sincerity, endurance (sometimes) to work long hours, leadership skills. Academic courses relevant to the project: Financial Management, Principle of Economics, Highway Engineering, Fundamentals of Finance and Accounting Name: Anirudh Garg (2015A1PS0498P)	2018- 19- sem1
PricewaterhouseCoopers, Gurgaon	Worked on various Oil & Gas projects including time mapping of steps involved in operating a petrol retail outlet in India, creating heat map for petroleum demand in India and Australia, analysing the life cycle of refineries in India, drafting market proposition by Indian Oil and Gas industry, preliminary market evaluation for Asian countries based on their favourability towards Oil and Gas downstream units, evaluating supply costs for Angola Oil and Gas industry. Tool used (Development tools - H/w, S/w): Word, Excel & Power-point Objectives of the project: Detailed project report for consultancy services for various oil and gas giants Major Learning Outcomes: Learnt primary interaction with clients and understood the art of conducting market assessment. Brief Description of working environment, expectations from the company: Had a very good experience in terms of work exposure. Handled lot of good clients. Gained understanding of Oil & Gas industry. Could have allotted a single big project and can be more active in internal job transfers and role change. Change of team and sector should be an option. Academic courses relevant to the project: Principles of Management Name: Shardul Walwadkar (2014B3A80798G)	2018- 19- sem1

Company	Experience	Year
PricewaterhouseCoopers, Gurgaon	The projects for me were from shipping and logistics domain and their nature was mainly as follows1. Secondary research and analysis to support ongoing projects 2. Stand-alone projects related to benchmarking analysis and developing Point of View Documents Tool used (Development tools - H/w, S/w): Excel, power point, word Objectives of the project: Learning about the industry, developing internal knowledge, client deliverables and proposals for bid Major Learning Outcomes: Domain Knowledge & Soft Skills Brief Description of working environment, expectations from the company: Professional behaviour, Ownership of work and drive to learn about the sector Academic courses relevant to the project: Fundamentals of Finance and Accounting, International Business. Name: Rahul Singh (2015A2PS0856P)	2018- 19- sem1
PricewaterhouseCoopers, Gurgaon	The projects allotted to me were concentrated on but not limited to capital goods and infrastructure development in industrial parks. You need good business acumen and sector knowledge to excel at work place. Tool used (Development tools - H/w, S/w): EMIS database, Forrester research and Bloomberg, MS office Objectives of the project: Development of industrial corridor with world class features Major Learning Outcomes: Business operations, strategic planning, dealing with clients, etc. Name: Santosh Das (2015A3PS0281P)	2018- 19- sem1
PricewaterhouseCoopers, Gurgaon	The assignments given are based on Standards and labelling of electrical appliances as part of energy efficiency initiatives by the government of various countries. The main assignment was the development of design specification for metering equipment to be used in a household energy consumption survey in Ghana. This was followed by the development of an appliance ownership questionnaire for the same survey. Apart from these, market assessment of deep freezer and electric iron for India was completed as research assignments at PwC. Tool used (Development tools - H/w, S/w): Word, Excel & PowerPoint Objectives of the project: Development of PwC standard deliverables (reports, ppt, etc) for the respective assignments. Major Learning Outcomes: Developed understanding of the approach and methodology of consultancy firms. Gained knowledge about various energy efficiency projects, policies and frameworks undertaken by countries. Brief Description of working environment, expectations from the company: Highly professional work environment; ideal for getting a fair idea about the consulting industry; type of work and responsibility offered depends on the manager of your team; Client interactions and work related travel depends on the project of your team; Variety of work is less; PPO opportunities depends on the requirement in your team and whether or not you have higher studies plans; CTC offered is 9.6 LPA. Student Name: K.Milind Mohan Rao (2015A2PS0588H)	2018- 19- sem1
PricewaterhouseCoopers, Hyderabad	The essential characteristics with respect to development of an industrial park are studied, which includes case studies from India and abroad. The project cost assessment for a sample industrial park is undertaken, based on existing benchmarking, with a special focus on textile parks. This followed by construction phasing of different infrastructure components in the industrial park and understanding their correlation with offtake rate of plots Objectives of the project: The main objective of the project is to promote the use of phased approach in the case of big projects Major Learning Outcomes: Efficient communication skills Report writing skills Proficiency in MS-Office Benchmarking study Academic courses relevant to the project: Water and wastewater Management Name: Ananth Chandrasekhar (2015A3PS0213G)	2018- 19- sem1
PricewaterhouseCoopers, Hyderabad	Did a market analysis of Offshore Wind in India and Abroad Tool used (Development tools - H/w, S/w): Excel, Word, Powerpoint Objectives of the project: To analyse the market for offshore wind both in India and abroad ahead of India's first Offshore wind tender Major Learning Outcomes: Knowledge about Offshore Wind, policy and regulatory measures, understanding of the market and it's drivers and bottlenecks Brief Description of working environment, expectations from the company: An excellent working environment with friendly colleagues and helpful managers. Name: Aditya Kumar Jha (2015A3PS0173G)	2018- 19- sem1
PricewaterhouseCoopers, Hyderabad	Working on various live projects in renewable sector. Tool used (Development tools - H/w, S/w): MS Suite Objectives of the project: Restructuring stressed Power sector assets based on the new insolvency codes and learning from other sectors Major Learning Outcomes: Proficiency in Ofiice suite, Due diligence, Convention and renewable electricity sector: Policies and Practises Academic courses relevant to the project: Securities Analysis and Portfolio Management (SAPM) Name: Sanyukta Singhal (2014B1A20655P)	2018- 19- sem1
PricewaterhouseCoopers, Hyderabad	Working on the planning of urban infrastructure projects like Kochi-Bangalore Industrial Corridor, Assam development project Tool used (Development tools - H/w, S/w): Excel Objectives of the project: To predict the corridor volume to plan the rapid transit system in Chennai Major Learning Outcomes: Developing a statistical model for predicting corridor volume Academic courses relevant to the project: CPT, FinMan Student Name: Mansi Pandey	2018- 19- sem1

Company	Experience	Year
PricewaterhouseCoopers, Mumbai	PWC is broadly a consultancy company, providing its services over a plethora of domains such as Infrastructure, Deals, Business Management, etc. Interns are assigned to the GRID division of PwC, allotted the Capital Project & Infrastructure Team, a further division of which is Transport & Logistics, Real estate and Urban Transportation.GRID division works on all the infrastructure projects of PwC. I was part of Real estate and Urban transport team and given a research project on Bus Rapid Transit System (BRTS) in which you analyse system at different parts of world besides that I worked on project like Mumbai 2.0, Maintenance efficiency of buildings, Smart Cities Project and some research work on currently ongoing projects with team. Tool used (Development tools - H/w, S/w): Microsoft Word, PowerPoint, Excel Objectives of the project: To create a Pitch Perfect document for Bus Rapid Transit System that help the firm save time in educating a professional. Major Learning Outcomes: My work on Bus Rapid Transit System at PwC aims to provide its professionals with readily available information on the topic instead of finding different sources and starting all over again which takes up huge amount of time which is a great resource in the professional consulting world. This project aims to save at least 2 months per professional if they are on Bus Rapid Transit System. This project can be used for pitching BRTS to government for developing in various cities by PwC. Brief Description of working environment, expectations from the company: PwC has a great work environment. Everyone is treated equally and cordially. The office hours are flexible and the environment in the office in general is good. The co-workers are always ready to help us in any way and you get to learn a lot from their experience. The various facilities within the office complex are great. The infrastructure provided by the firm is also great enabling us to work smart. We will also get a firsthand experience of life in a big corporate companies. Name:	2018- 19- sem1
PricewaterhouseCoopers, Mumbai	Analyse the current and future features of ports of India to find the potential of east coast port that can be developed. The importance of waterways in India is discussed which can reduce the logistics cost significantly. Initially, the container traffic is forecasted using GDP trend, population trend and throughput at ports to calculate the expected traffic using Microsoft Excel. Later, parametric study of ports is done to rank the ports according to different parameters like port infrastructure, industrial clusters, land availability, management etc. Tool used (Development tools - H/w, S/w): Ms Excel, Ms Powerpoint Objectives of the project: Point of View on Container Traffic of East Coast Ports of India Major Learning Outcomes: Enhanced thought process after series of discussions with the team members Name: Divyanshu Goyal (2014B4A40694P) Tool used (Development tools - H/w, S/w): MS office Objectives of the project: Market assessment Major Learning Outcomes: Tools like financial modeling, MS Dynamics 365 Client facing experience. Academic courses relevant to the project: Operations research	2018- 19- sem1
Publicis Sapient , Bangalore	we had a hands on training for 1 month, after that I am with hiring team where i worked on IVR (Interactive Voice Response) on AWS cloud to check the interview scheduling and confirmation of candidate and on Automatic Resume score which scores the resume for a particular job description and suggest the best suitable one. Tool used (Development tools - H/w, S/w): AWS, Java, Python, spring boot. Objectives of the project: To automate the works of Hiring Team. Major Learning Outcomes: We got hands on how the AWS services works and what are the challenges in the process and learnt many new libraries in python. Details of Papers/patents: Brief Description of working environment, expectations from the company: We got the first hand experience of how MNC works and the culture of the sapient is very great, people are friendly and are approachable, you will be directly be under some director level or senior manager and will guide through whole journey. Many new technologies will be learnt in journey. Company expects us to be thinking out box attitude and hunger for learning and dedicated to given work. As an intern they expected /pushed towards more learning and exploring the projects. Academic courses relevant to the project: OOPS,DSA,IR,Data Mining,Cloud computing.	2019- 20- sem1
Publicis Sapient , Bangalore	Tech Stack - Spring Boot, React JS, Mockito, Logging Students are allotted different projects and they have to deliver PoCs based on the problem statement given. Training of one month in Java and related concepts. Tool used (Development tools - H/w, S/w): Java, TDD, Maven, Spring, React, Node Objectives of the project: Build a recommender system Major Learning Outcomes: Full Stack and DevOps Details of Papers/patents: Brief Description of working environment, expectations from the company: Work culture is decent, and learning experience was good. Academic courses relevant to the project: OOP, DSA	2019- 20- sem1

Company	Experience	Year
Publicis Sapient , Bangalore	I built a chat-bot that enabled one to perform different tasks like creating or updating a Jira issue, raising a request to DOJO, use Bamboo and it's features and get reports on the projects. I also helped build a resume parse which could extract information like colleges, work experience, skill etc from a resume, convert it all in numerical format and decide whether the individual is suitable for a particular role. Tool used (Development tools - H/w, S/w): Java, RASA Framework, Python 3, React, PostgreSQL, AWS Objectives of the project: Build a one stop solution for Jira and DOJO Tools Major Learning Outcomes: The major learning outcome from the internship was that it gives you the experience of working on a deadline which we may not experience anywhere else. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is good. PPO is given if you clear a coding test, a technical round and finally an HR round. Academic courses relevant to the project: OOP, Machine Learning, Information Retrieval	2019- 20- sem1
Publicis Sapient , Bangalore	IT, Software Development: My project was a large scale project where I was to develop a feature for the tool on which the whole team was working on each of its aspect. I worked on the design and the back-end development of the feature which was to be deployed for real time use. Tool used (Development tools - H/w, S/w): Java, Eclipse IDE, Non relational database scripting, Spring Framework Objectives of the project: Develop Role Based Access Control Framework Major Learning Outcomes: The whole development process of a Software Details of Papers/patents: Brief Description of working environment, expectations from the company: Very collaborative and Interactive Team, encouragement to Perform your best and also helps in overall soft skill development of an individual, with various sessions conducted for the same Academic courses relevant to the project: OOP, DSA, DBMS, ML(partially) Student	2019- 20- sem1
Quantiphi	Computer vision, deep learning Tool used (Development tools - H/w, S/w): Python, tensorflow, Google cloud Objectives of the project: Object detection using computer vision Major Learning Outcomes: Latest computer vision techniques and algorithms. Brief Description of working environment, expectations from the company: Interesting work, good learning environment Academic courses relevant to the project: Machine learning, neural networks, image processing Name: Sumit Godara (2014B5A30858P)	2018- 19- sem1
Quantiphi	I was asked to build a Recommendation System which have an accuracy of more than 98%. Tool used (Development tools - H/w, S/w): Machine Learning Objectives of the project: To recommend client the products to be put in a vending machine so as to increase their sale. Major Learning Outcomes: Basics of Machine Learning, Python, Data Science Brief Description of working environment, expectations from the company: Working environment is casual, you got to maintain the interest in your work, otherwise it's just routine. And since it's a startup, work from you is expected, so a great learning opportunity for those who are interested in the field of ML. Academic courses relevant to the project: Machine Learning Name: Sourabh Sunil Halleppanavar (201B1A80721G)	2018- 19- sem1
Quantiphi	My work was majorly related to deep learning, with building of automation framework in keras, and detection of faces' age and gender from the given image, and implementing an object tracker, to track the moving object, frame to frame. Tool used (Development tools - H/w, S/w): Keras, Tensorflow Objectives of the project: Implementing client usecases using deep learning Major Learning Outcomes: Good exposure deep learning, and its implementation Academic courses relevant to the project: Neural networks and fuzzy logic Name: Harshil choudhry	2018- 19- sem1
Quantiphi	The work is quite challenging and the organization is fast paced. Tool used (Development tools - H/w, S/w): Python, tensor flow Objectives of the project: Make a chatbot Major Learning Outcomes: Deep learning Details of Papers/patents: Gec paper by Facebook melno park Brief Description of working environment, expectations from the company: Startup culture, demanding work Academic courses relevant to the project: Machine learning.	2018- 19- sem1
QUANTIPHI , Mumbai	Explored various ways of reducing the inference and training time of a Machine learning model. Implemented Tensor flow serving and Tensor RT optimisations on company's various model. Tool used (Development tools - H/w, S/w): Docker, python, keras, onnx, tensorflow Objectives of the project: Reducing the inference and training time of a Machine learning model. Major Learning Outcomes: Learned about the optimisation of various ML models Details of Papers/patents: Brief Description of working environment, expectations from the company: Not much facilities but the learning curve is high Academic courses relevant to the project: Machine Learning, Foundation of data science, Al Mentor Mentor comments: Students are interactive and knowledgeable. They are proactive in solving the tasks on time. Students should be from computer science discipline. Here they learn all the latest technologies related to data. Brief write-up on PS-II station: All the three stations are software based organizations. The general expectations from stations are students should be from computer science background (Qubole) and if not, they should have done electives or acquired enough skill sets on Python, Java, Database, Spring, Hibernate etc Student	2019- 20- sem1

Company	Experience	Year
Qubole	Integration testing of new product offering based on Presto big data engine in a dockerised environment. Presto code is all in Java. Another task was modifying open source Tempto testbench for Presto to mimic Qubole's use case of writing results to S3. Additionally, I was tasked with creating reports on notebooks on important raw query information as well as performance metrics. This was done using Spark with Scala and Presto. Smaller tasks involoved automating a test for a new feature in production and modifying a query event listener to upload relevant data to S3 in a periodic manner. Tool used (Development tools - H/w, S/w): Java, Python, Presto, Hive, Spark, Scala, Docker, Maven, IntelliJ Idea Objectives of the project: Gain requisite knowledge of code base, programming languages, frameworks to complete tasks Major Learning Outcomes: Handling large code base with editor and industry Git workflow, Hive DDL, Presto and Spark Scala experience, exposure to S3 Academic courses relevant to the project: Databases, OOP Name: P Sudarshan (2014B3A70749H) Tool used (Development tools - H/w, S/w): Ember, Ruby on Rails, Git Objectives of the project: Development of Features for a New Platform Major Learning Outcomes: Ember, Ruby on Rails Academic courses relevant to the project: OOP, DSA Name: Vadaga Ananyo Rao (2014B5A70910G)	2018- 19- sem1
Qubole	My project was on Apache Hadoop, which is a cloud cluster management software. As part of my project, i worked on implementing a simulator for Hadoop YARN. This was done to check offline the improvements in Hadoop logic. Later I worked on scheduling algorithms for hadoop jobs and made a business case proposal for the same. Tool used (Development tools - H/w, S/w): Apache Maven, Apache Hadoop, git, IntelliJ Objectives of the project: Improvement of scheduling algorithm of Hadoop YARN Major Learning Outcomes: Cloud cluster management software functioning, Forming business case and execution of a technical project idea Brief Description of working environment, expectations from the company: Hadoop team expects a good experience with Java. Also, a detailed knowledge of algorithms and drive to independently take charge and execute projects will be strong tools to learn more from the Hadoop team. Academic courses relevant to the project: OOP, DSA, DBMS, CompArc Name: Saurabh Shekhar	2018- 19- sem1
Qubole	Got to work on several features and languages including python, java, ruby, javascript, advanced shell scripting etc. Also, got familiarized with the chef infrastructural framework. Tool used (Development tools - H/w, S/w): Chef, Jenkins, git, bitbucket, postman, aws sdks, newman, nailgun, hadoop, signalFx.  Objectives of the project: To reduce machine bringup time in aws to support autoscaling Major Learning Outcomes: Got familiarized with the aws and azure clouds and worked on several features including hadoop, nailgun etc. Worked on several things. To name a few, worked to bring down machine bringup time in cloud-premises so that autoscaling can be smooth and customer experience can be enhanced. Besides, worked on aws-java sdk libraries, tunnels, several languages. Learnt ruby on rails from scratch. Got to work with hadoop,hive and spark clusters and their features that with very recent technological advancements. Brief Description of working environment, expectations from the company: A very friendly and progressive environment. At no time, one feels like lost, u always get guidance when you seek (IT DOESN'T MEAN FOR EVERYTHING JUST APPROACH THEM. they won't mind, but, it's better if u struggle enough first). Furthermore, perks are like unlimited. Unlimited leaves, chill office timings, all you need to do is get your work done. That's it! Academic courses relevant to the project: Nothing as such. It would be good if you know Operating Systems (bit idea about networking and all). Nonetheless, you can learn everything when u are subjected to! Name: Saniket More (2014B4A70515P)	2018- 19- sem1
Qubole	First major project was to find breakpoint of various components of qubole architecture. Before that, we didn't know what's bottleneck in architecture. After this analysis, we understood breakpoint of our system which will help us now to autoscale in peak times. Another project was - To analyze data generated at qubole platform every day. Generated graphs which will be sent to entire organization in form of report every morning via email which will be helpful in deriving meaningful insights. One example of such graph is - distribution of total commands arcading to command type. it will help us understand which command type contributes more to the load. The various latencies graph will tell us which part is taking more time to run and hence corrective actions can be easily taken. Another notebook has been written which keeps track of trends in last month which will tell us how customers are changing. Another major project was to retire DDJ tier from architecture. It saved millions of dollars for qubole. Tool used (Development tools - H/w, S/w): Amazon aws, zeppelin, sql, locust, postman Objectives of the project: To understand qubole architecture in depth, benchmark it, retire one module from it and do data analysis on generate data Major Learning Outcomes: Amazon aws, Zeppelin notebook, python, ruby, java, hive-sql Brief Description of working environment, expectations from the company: Work culture is very good. Interns directly get cutting edge projects. Large proportion of employees are in their 20s. So very informal and friendly mentors. No in-time, out-time. Only thing that matters is you deliver assigned work. Academic courses relevant to the project: DSA, OOP, Basic data science Name: Aditya Shah (2014B4A70715P)	2018- 19- sem1

Company	Experience	Year
Qubole	I worked in Hive Team. Hive is a data warehouse infrastructure tool to process structured data in Hadoop. It summarizes Big Data, and makes querying and analyzing easy. Initially Hive was developed by Founders of Qubole at Facebook, later the Apache Software Foundation took it up and developed it further as an open source under the name Apache Hive. Qubole maintains its own internal repository of the project with additional optimisations and support for auto scalable clusters. The tasks that I had been assigned were mainly of the objective to understand the different aspects of the project, modify existing features and add to the existing features to enhance the product. Two major projects I worked upon were improving tez mapper estimation considering auto-scaling and Eventual Consistency check in Hive. Tool used (Development tools - H/w, S/w): git, jenkins, hadoop, hive Objectives of the project: Developing and Contributing to Qubole Hive Major Learning Outcomes: These projects have familiarized me with the internal tools and functioning of QDS as well as helped me understand the workflow of Qubole Hive and it's various features. Brief Description of working environment, expectations from the company: The company work environment is good. People were helpful through out. Projects are interesting and learning curve is steep. Overall a good learning opportunity with very open and balanced environment. Academic courses relevant to the project: DataBase Management System, Object Oriented Programming, Computer Networks, Operation System, Data Structures and Algorithms Faculty Name: Prof Sandeep Kayastha	2018- 19- sem1
Qubole , Bangalore	Implemented CI Pipeline of Qubole using Jenkins 2.0. Tools used (Development tools - H/w, S/w): Jenkins, Groovy, JAVA, Selenium Cucumber UI Testing Objectives of the project: Reduce release cycle time of Qubole Outcomes of the project: Reduced release cycle of Qubole from 28 days to about a week. Major Learning Outcomes: Git tools, Agile Development (Atlassian JIRA) Brief Description of working environment, expectations from the company: Environment is pretty cool to work if you feel passionate about the work you are doing. Though, I would like that they disclose the projects each individual assigned to it is going to work on as I was assigned the QA team but my real interest lies ion core development which was a letdown. Otherwise, company is pretty cool to work with.	2016- 17- sem1
Qubole , Bangalore	Worked as a part of the Middleware Team at Qubole which maintains and updates the application framework that the Qubole software runs on. I was allotted two projects during the course of my internship, both of which involved major changes to the code in production and served as an integral addition to the work done by the company. I was writing code in mostly Ruby on rails with substantial use of MySQL queries. Other technologies that I got to learn about as a part of my internship were Hive, Spark and Hadoop. Tools used (Development tools - H/w, S/w): Ruby on rails, MySQL, Hive, Spark, Hadoop Objectives of the project: New Credentials Validation Framework; Fetching logs from the cluster machine Outcomes of the project: Designed an updated version of the Credentials Validation Framework and created an API for the same; Wrote a script to fetch logs from cluster machine which are needed by the Support Team to resolve customer issues. Major Learning Outcomes: Learned about designing new frameworks which make the existing frameworks perform better. Designed tools from scratch for the Support Team which reduced the time taken by them for issue resolution by almost 100%. Great opportunity to get hands-on experience in development and learning about new and upcoming Big Data technologies like Hive, Spark and Hadoop. Brief Description of working environment, expectations from the company: Qubole has a typical Startup culture where every member of the company is assigned integral roles, be it an employee or an intern. Most of the work is done using latest technologies. The company expects its employees to have good inter-team communication as there is a big interdependence between the work that several teams do. There are weekly meets for every Team where work done by each member is discussed and schedule for the next week is decided. These meets are to discuss the deadlines and release dates of majority of the products and one is expected to meet with these requirements.	2016- 17- sem1

Company	Experience	Year
Qubole , Bangalore	My work included working with cloud technologies and infrastructure configuration tools like Chef, Terraform, and Docker. I got to learn about different Amazon Web Services such as their compute cloud service, S3 storage service, RDS and Elastic Cache database services, and many others. I worked with AWS Ruby SDK where I wrote code to bring up new EC2 instances and configure them according to the user's preferences automatically and quickly using Chef recipes and terraform templates. Everything was automated and all this happened just by one command entered by the user. Tools used (Development tools - H/w, S/w): Ruby AWS SDK, Chef, Terraform, Amazon Web Services (EC2, IAM, RDS, Route53) Objectives of the project: To give every employee at Qubole a development version of the Qubole Environment for themselves. Currently, the employees outnumbered the environments by a factor of 7:1. Outcomes of the project: Now, every user has an env to develop and test code. Now they don't have to contest for the environments and they can just bring up their own in less than 15 minutes. These are throwaway environments so that the company doesn't get billed for idle envs. Major Learning Outcomes: Understanding of Infrastructure behind Applications, Ruby application stack understanding. Amazon Web Services knowledge. Brief Description of working environment, expectations from the company: The work environment was friendly and cooperative. There is a huge scope for learning because of the age relevant technology stack at Qubole. The employees are forever ready to entertain doubts and are very competent at explaining difficult concepts in a simple manner.	2016- 17- sem1
Qubole , Bangalore	Developed a caching framework named RubiX. RubiX is a light-weight data caching framework that can be used by Big-Data engines. RubiX can be extended to support any engine that accesses data in cloud stores using Hadoop FileSystem or Amazon S3 interface via plugins. Most of the work I've done is JAVA development. Apart from that I've also used Python and written bash shell scripts. For JAVA development I am using IntelliJ IDEA as my IDE. I am also constantly using Git which is a distributed revision control and source code management system. Through my work, I am learning about Big Data technologies like Hadoop, Hive and Presto. Tools used (Development tools - H/w, S/w): Git, JAVA, S3 Objectives of the project: Develop a caching framework that can be used by Big-Data engines Outcomes of the project: Increase in speed of Big Data queries for Hadoop2, Hive and Tez and additional features in the framework. Major Learning Outcomes: OOP, Big Data Systems, Cloud storage, MR Brief Description of working environment, expectations from the company: The work environment was friendly and cooperative. The employees are forever ready to entertain doubts and are very competent at explaining difficult concepts in a simple manner. It was a great learning experience. The startup atmosphere was enriching. Mentor Designation: Senior Technical Lead BITS Pilani students contribute in several projects of Sabre in constructive way. They are good in understanding the technology and quickly come up to the speed. Faculty Sabre is one of the world's largest software companies providing software solutions for travel reservations and hospitality industry. Students interested to their internship should be familiar with database systems, Web development, JAVA, scripting, OO and testing methodologies. Student	2016- 17- sem1
Qubole , Bangalore	I interned in the admin team. This team mostly takes care of the administrative responsibilities like account creation, account updating, assigning roles, policies and editions for accounts etc. My work involved backend development of qubole interface. My work was majorly on the improvements of account flow and other minor modifications Tool used (Development tools - H/w, S/w): QIB(Qubole in box), Vagrant, Ruby On Rails, Postman, Sequel Pro Objectives of the project: Obectives involved modifying the account flow Major Learning Outcomes: Understood how the real industry works and learnt how to write industry level code Details of Papers/patents: None Brief Description of working environment, expectations from the company: The work environment was pretty friendly and the timings were very flexible. Academic courses relevant to the project: DBMS, OOP, DSA	2019- 20- sem1
Qubole , Bangalore	I worked in ACM team which deals with clusters. I had to work on a new feature that had to be introduced. It was majorly related to handling AWS resources and configuring them to the required specifications to use the new feature. Other than this some basic work was always given at the side line. Tool used (Development tools - H/w, S/w): Aws console, boto3, JIRA, BitBucket, python, ruby Objectives of the project: Completing the phase one of a new feature Major Learning Outcomes: Standard coding practises, team work, ruby, managing large code base and understanding it Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The work environment here is very friendly. People are very helpful. As an intern, I think people had the right approach towards my expectations. But even though as an intern, your opinions are taken seriously and thought over before taking a step in doing something. Academic courses relevant to the project: OOPS, C Programming, DSA, DBS	2019- 20- sem1

Company	Experience	Year
Qubole , Bangalore	I worked on optimizing and creating new ETLs(Extract Transform Load Pipelines) to check the status of other ETLs. Worked on Data Validation for the data sent to the customers after analyzing the cluster metrics and data. Tool used (Development tools - H/w, S/w): Hive, Hadoop, Python, Scala, Java, Spark, Airflow Objectives of the project: Optimize and validate existing ETLs Major Learning Outcomes: Data Processing and Analytics for Big Data Details of Papers/patents: - Brief Description of working environment, expectations from the company: Working environment was free and flexible. My team members were helpful and very supportive. Lots of opportunities to learn at Qubole. The company works on cutting edge technology and encourages experimenting on new things. Academic courses relevant to the project: DBMS Student	2019- 20- sem1
Qubole, Bangalore	Worked as a developer in Hadoop team. As a part of Hadoop team worked on few projects related to code improvements in hadoop. My major project was related to using Apache knox as a single Hadoop gateway for proxying all hadoop related services. Tools used (Development tools - H/w, S/w): Hadoop, NGINX, Apache knox Objectives of the project: migration from using Cluster-proxy to Apache knox for proxying all hadoop related services Outcomes of the project: Helped me learning about the inner workings of Hadoop, NGINX, Apache knox Major Learning Outcomes: Learned a lot related to shell scripting, NGINX, Hadoop and Apache knox Details of papers/patents: People in qubole are always ready to help and clear your doubts whenever you need them to. One cannot find work culture better than that of Qubole's in any other company/startup. You will get to learn about the current trends in Big Data technologies and the inner workings of some of the tools used in this industry. As a fresher, the company provides you one of the best learning environments.	2017- 18- sem1
Qubole, Bangalore	At Qubole we are developing a platform for distributed deep learning as a service, Focused towards providing a reliable solution which blends well with the existing Qubole ecosystem. Tools used (Development tools - H/w, S/w): Bash, python, scala, jenkins Objectives of the project: Building deep learning cluster Outcomes of the project: Deep learning cluster v0 Major Learning Outcomes: Shell scripting Brief Description of working environment, expectations from the company: Good work environment, free lunches.	2017- 18- sem1
Qubole, Bangalore	At Qubole is currently using a combination of Ganglia and Datadog for monitoring its clusters on various cloud platforms like Amazon, Azure and Oracle. However, the present Ganglia and Datadog monitoring solution has certain disadvantages like non-interactive user interface, high disk space usage, and being expensive. Therefore, the alternative is to explore if it is possible to replace the existing Ganglia and Datadog monitoring framework with an effective open source solution like Prometheus or Influxdb Tools used (Development tools - H/w, S/w): Shell script, Java, Scala, Python, Prometheus, Influxdb Objectives of the project: Explore a monitoring framework for Qubole Outcomes of the project: Integrated Prometheus with Qubole Data Services Major Learning Outcomes: Knowledge about monitoring frameworks, shell scripts, java, scala, python Brief Description of working environment, expectations from the company: Qubole provides great learning experience and has awesome work culture.	2017- 18- sem1
Qubole, Bangalore	Notebooks are a vital component of the QDS (Qubole Data Service) platform. They are used by a wide range of customers with different needs such as data analysis, data management, data extraction and so on. The tasks that I had been assigned were mainly of the objective to understand the different aspects of QDS notebooks, modify existing features and add to the existing features to enhance the product. Tools used (Development tools - H/w, S/w): Ruby on Rails, Postman, Git, AWS Objectives of the project: Develop features and emhance existing features of Qubole Data Service (QDS) notebooks on the Middleware side. Outcomes of the project: Features being used in the company's services/products Major Learning Outcomes: Ruby on Rails, Understanding the whole software development cycle Brief Description of working environment, expectations from the company: Very friendly environment where people are ready to help if needed. Even though there is a relaxed work culture, people are committed towards their work. There is not much pressure to meet deadlines as such and tasks are assigned depending on how much one can/wants to take. By the virtue of it being a growing start-up, one can see one's code going into production, this may not be the case in established companies. Academic courses relevant to the project: Object Oriented Programming, Computer Programming, Principles of Programming Languages	2017- 18- sem1

Company	Experience	Year
Qubole, Bangalore	I was assigned the QA team. My project was adding multicloud support in the ui-tests framework that the company used. The old code was written only for aws clouds. I added support for azure and oracle clouds in the codebase and also made the code base cloud agnostic. The codebase was written in java and also used Maven, Cucumber and Selenium as the automation and regression test suite. I worked across multiple vertical teams like ACM, Analyze, Explore, etc, which are basically different pages supported in the qubole data service. Tools used (Development tools - H/w, S/w): Eclipse, Mave, Selenium, Cucumber, Bitbucket, Jenkins Objectives of the project: Adding multi-cloud support in the ui-test framework Outcomes of the project: Made the test framework cloud agnostic Major Learning Outcomes: UI automation, a bit of API automation, use of various tools mentioned above. Brief Description of working environment, expectations from the company: The working environment was very comfortable. All the employees were ready to help whenever we had any doubts. The lunch bill reimbursement was a big plus. The office is in a nice area. Expectations: More focus on azure customers as there are not a lot of competitors currently in the market. Using more cutting-edge technologies. Academic courses relevant to the project: Object Oriented Programming, DSA, Networks(little bit).	2017- 18- sem1
Qubole, Bangalore	I was allocated UI team so, for initial one month I was just fixing bugs and doing improvements in the UI. Then for about a month after that I worked on moving test infrastructure to CI pipelines. For majority part of the rest of the internship, I was working on revamping the feature roll out infrastructure. Tools used (Development tools - H/w, S/w): Ruby(mostly), Jquery, Ember, Node.js, Docker, Python, Java Objectives of the project: Revamp Feature Rollout Infra Outcomes of the project: Revamped Feature Rollout internals Major Learning Outcomes: Coding Practises. Brief Description of working environment, expectations from the company: Qubole has an amazing work culture and everyone from top managers to co-workers are very approachable. The project allotment is at random mostly (still, do fill out the bio carefully) but, irrespective of team you get, they will ensure that the work matches your capability. Academic courses relevant to the project: Object Oriented Programming Student	2017- 18- sem1
RACEnergy , Hyderabad	My work involved firmware development for ARM microcontrollers using C. I developed and used driver files for various STM32 microcontroller peripherals. One of my projects was to develop firmware for microcontrollers in smart battery packs. I also developed a PCB using Altium Designer for an ideal diode circuit with load switching. Tool used (Development tools - H/w, S/w): Keil IDE, Altium Designer, C programming, Git Objectives of the project: Firmware Development and testing for ST microcontrollers; Ideal Diode Circuit Design Major Learning Outcomes: Learnt about ARM M3/M4 architecture, Firmware development using C, PCB Design Details of Papers/patents: Brief Description of working environment, expectations from the company: Being a startup the work environment is flexible within deadlines. Employees are very friendly and helpful. My mentor provided constant support when I was stuck and guided me in the right direction. Academic courses relevant to the project: Embedded Systems Design, Computer Programming, Data Structures and Algorithms Student	2019- 20- sem1
RBJ Technologies , Hyderabad	Initially, the work was market research and competitor research for one of the upcoming products of the company. We explored new geographies where the products could be launched and which would be financially viable for the company. I also did 'User Experience Research' for one of the upcoming products of the company. Then, I worked in the Marketing Department of the company. There, the major part of my work was to improve the Search Engine Optimisation of the company's website. I explored and executed numerous strategies for the same. Tool used (Development tools - H/w, S/w): Google Suite Objectives of the project: Improve SEO of Website, Improve UX/UI of product Major Learning Outcomes: Improved Google Ranking of Website, Improved UI of product Academic courses relevant to the project: Business Analysis and Valuation Name: Monark Shrimal (2015A1PS0727P)	2018- 19- sem1
RBJ Technologies , Hyderabad	Market Research, New Product Development, Design, Testing, Improvement in the productivity and efficiency of the product. All were included in the project work. Objectives for the 2 projects were to i. Analyze product features & optimize time-cost parameters for Cloud Rendering solution MAGIK RENDER and suggest a feasible Business Model and ii. Define Strategies, Functionalities & User Stories for efficient product management of 3D Modelling solution SLATE and prioritize features for alpha deployment. These were the two project objectives. Cloud rendering is affected by factors that include the 3D model file settings. The 1st project aimed at optimizing variables based on cloud to help reduce render time & cost for each job uploaded via the MAGIK RENDER platform. The 2nd project SLATE allows user to create basic floor plans and visualize the 3D space in real time. Tool used (Development tools - H/w, S/w): Excel Basics, 3DS MAX, VRAY Objectives of the project: Business Analytics, Product Management & QA Testing Major Learning Outcomes: Cloud Technology, VFX, CGI & Animation, 3D Modelling in Architecture & Interior Design Industry. Name: Kavyansh (2015A1PS0769H)	2018- 19- sem1

Company	Experience	Year
RBJ Technologies , Hyderabad	Go-to-Market plan supporting Foyr to open up the Dutch B2B market to promote and sell products and services for Architect & Designers and Builders. Tool used (Development tools - H/w, S/w): MS Office Objectives of the project: The process and planning for market entry in the Netherlands. Major Learning Outcomes: Competitive analysis, market research, analytics Brief Description of working environment, expectations from the company: Initial work involved market research for various products of the company. We explored new geographies where the products could be launched and which would be financially viable for the company. The major work was done on market research, first started with Srilanka and Bangladesh and later on Netherlands. Competitive analysis of the above countries and helped in capturing the market. Goto-Market plan supporting the company to open up the Dutch B2B market to promote and sell products and services for Architect & Designers and Builders. Also managed many events in the company and made them memorable. Academic courses relevant to the project: FOFA, DRM, SAPM, FM Name: Akshansh Sharma (2015A1PS0548P)	2018- 19- sem1
RBJ Technologies , Hyderabad	Initial work involved market research for various products of the company. Then major work was done on one of its products which aims to provide cloud rendering solutions to various interior designers and architects who use 3D visualization technology. The work focused on testing, analysis and optimization of the product. Doing different POCs and competitive analysis to improve performance so as to make a feasible business model for the product. Nature of work done: Research+New Product  Development+Design+Testing+Improvement in the productivity and efficiency of the product & services Tool used (Development tools - H/w, S/w): 3DS Max, MS-Excel, MSPowerpoint Objectives of the project: Testing, analysis and optimization of the product Major Learning Outcomes: Market research, cloud computing technology, 3D visualization, VFX	2018- 19- sem1
Reflexis Systems India Pvt Ltd. , Pune	Worked on time series forecasting using deep learning methods alongside basic NLP elementary data analysis Tool used (Development tools - H/w, S/w): Python, pandas, jupyter notebook Objectives of the project: Develop a model for time series predictions Major Learning Outcomes: Learnt about deep learning methodologies Details of Papers/patents: Brief Description of working environment, expectations from the company: Really relaxed and open environment with no pressure Academic courses relevant to the project: None	2019- 20- sem1
Reflexis Systems India Pvt Ltd. , Pune	My project gives details regarding implementation of features like Aggregation Query, Purge Service, Logging, Testing in the form of API for Employee Performance Platform developed by Reflexis from tools like Spring boot, JAVA8, MongoDB Tool used (Development tools - H/w, S/w): Spring boot, JAVA8, MongoDB Objectives of the project: Make services and features for Employee Performance Platform Major Learning Outcomes: Learnt to work on a big project as well learnt lot of new technologies and how they are used in industry. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is very good. There is a great work life balance. Company and their employees are great too. Everything is great. Academic courses relevant to the project: Object Oriented Programming	2019- 20- sem1
Reflexis Systems India Pvt Ltd. , Pune	Was assigned to the Analytics team with my mentor based in the US. Worked extensively in the domains of Natural Language Processing, Deep Learning and Time Series Forecasting. The first project involved using various ML techniques combined with NLP to conclude whether we can predict the delay of project execution at the store level using comments and other project relevant information internal to a company. The findings of this project were part of the CEO's keynote during Reflexions 2019, the company's annual product showcase event. The second project involved developing various Deep Learning Models for Time Series Forecasting. This involved developing and experimenting with various types of ResNets, GRUs, clustering of time series using Dynamic Time Warping and consequently using the clusters for building super multi-unit models. Also briefly worked in the area of ABTesting. Tool used (Development tools - H/w, S/w): Python, Jupyter, Spark Objectives of the project: To conclude whether comments can be used to predict delays in store-level project execution and developing deep learning models for time series forecasting Major Learning Outcomes: Major experience in predictive analytics, Natural Language Processing and extensive research and development of Neural Networks for Time Series Forecasting Details of Papers/patents: Brief Description of working environment, expectations from the company: Comfortable working environment. The office is not very big and the facilities are a bit lacking as compared to most medium-big companies. The amount of work you get depends a lot on the team you are allocated. In my case I was allocated a team that was developing a new product which also happened to be the Analytics team and a mentor who was a Data Scientist in the US team due to my past experience in the domain. This gave me ample opportunities to work on a researchbased project in the domain of my choice. Work timings are flexible for most of the part unless you have meetings scheduled with someone based in the US, i	2019- 20- sem1

Company	Experience	Year
Reflexis, Pune	Worked on both development and bug fixes as part of EMEA development team. Development was mainly backend using java,mySql,Spring etc while front end was a mix of technologies like JavaScript,Html,CSS,etc Tool used (Development tools - H/w, S/w): Java,MySQL, JavaScript, HTML, CSS, Spring, Angular JS,My Batis,DHTMLX Objectives of the project: To create a working delta function for core product, to create a full working HR management system and Bug fixes for core product Major Learning Outcomes: The technologies used were never used by me. I got to learn all of them and also be a core part of team. Brief Description of working environment, expectations from the company: Working environment is great, very good company for starters but massively underpay their employees. The amount of hard work and time you are required is not worth the final outcome. Great as a PS but wouldn't consider for job Academic courses relevant to the project: OOP(CS) Name: Hemant Kumar	2018- 19- sem1
Reflexis, Pune	Work on Selenium Testing of Web Product of the company Tool used (Development tools - H/w, S/w): Selenium Objectives of the project: Complete Test Cases Major Learning Outcomes: Java, Selenium Academic courses relevant to the project: OOP Name: Utkarsh Sirpurkar	2018- 19- sem1
Reflexis, Pune	Web development using React.js Tool used (Development tools - H/w, S/w): React.js/Mongodb/Java Objectives of the project: Prepare a custom product for client Major Learning Outcomes: Learnt front-end development Name: Swarit Kohli (2014B5A40607G)	2018- 19- sem1
Reflexis, Pune	I was in the Analytics web development team. We were to design a web application based on some html reference, and specifications given by the client. We had to use ReactJS to make the web page fully functional and interactive, such that even in the UI, the user is able to manipulate data in order to see it selectively, or call it at his demand. All of us were given various tasks pertaining to the same, and the major back end part was not done by our team. However, fetching data from back end to front end and linkin ghte project was also a part of the work we did here. Tool used (Development tools - H/w, S/w): ReactJS, ES6 Javscript, Java, Spring, Objectives of the project: To build the front end of a web application using ReactJS Major Learning Outcomes: ReactJS, Redux, Javascript, Java, Spring, Name: Aman Agrawal (2015A8PS0491G)	2018- 19- sem1
Reflexis, Pune	Training project: Full stack development of a web application to get the jist of how everything works and whats happening, so that the actual work later on is easier to understand QA Scripting: To test Reflexis' products. Instead of manual testing of the web application we designed and wrote scripts in Java and JavaScript using Selenium and TestNG among other tools to do the clicking and typing for the testers and then auto generating a bug report. Tool used (Development tools - H/w, S/w): Java and JavaScript using Selenium and TestNG among other tools Objectives of the project: To automate testing: make it more accurate and more than 20 times faster Major Learning Outcomes: Learned to use new software tools and got familiarised with full stack development of products. Brief Description of working environment, expectations from the company: The working environment is peaceful and calm with not much stress except during launch/releases (as far as i have heard). Not exciting Academic courses relevant to the project: Object oriented programming. Name: Subhaprada Chand (2014B4A30655H)	2018- 19- sem1
Reflexis, Pune	Worked as a part of the preforecasting group. Day-to-day work involved full-stack development using angularJS for the frontend and Spring MVC for the back-end. Tool used (Development tools - H/w, S/w):  Java, AngularJs, Eclipse, SVN, Aqua Data Studio Objectives of the project: Learning full-stack development Major Learning Outcomes: Learnt about working in a full-stack software team. Since there were no special projects for interns, we were part of the development team and worked with them. Brief Description of working environment, expectations from the company: Working environment is good. You are expected to work independently but whenever you need support, mentors are there to help. Academic courses relevant to the project: Object Oriented Programming, Introduction to Software Development Name: Kunal Choukse (2015A8PS0520G)	2018- 19- sem1

Company	Experience	Year
Reflexis, Pune	The training involved implementation of application for a WorkForce Management and Scheduling System developed by Reflexis. Tasks allotted to me included making 2 utilities, namely SQL Query Handler and Lang-Mapper. After completion of the utilities I was allotted pages to be adapted from the old roster module using new technologies. As a training project I also developed a full stack application, Pizza Delivery System which used technologies like AngularJS, Java, SpringREST and SQL. Tool used (Development tools - H/w, S/w): Java Angular Spring DB2 MyBatis HTML & CSS Objectives of the project: Completing the RWS app. Major Learning Outcomes: By working on the given project, I got an exposure to a lot of new technologies, with which I had not worked before, and the training helped me gain some experience in all of the software and frameworks being used for web application development. Most of the topics that they trained us in, I haven't read them before. So the overall experience of the tenure of the training was a very helpful one for me in order to know more about the nature of the work in an IT firm and what kind of skillset I need to develop in order to prepare for my future jobs and internships in the field. The number of technologies learnt in the small period of two months will surely help me a lot when I am trying to apply those concepts to my actual projects. After the training, I was working on the main app for Reflexis, which is not usually what a company lets interns work on. I wasn't side-tracked, and so we had proper deadlines and it was invigorating and a new experience. Brief Description of working environment, expectations from the company: It was nice. The people were nice. The boss, everybody said he is strict and difficult to work with, but I found him pleasant and motivating. The package should have been higher, according to me and the other interns because the work was draining. That is all. All in all a good company to start your career with as you get to learn a lot but the pay is low. L	2018- 19- sem1
Reflexis, Pune	Work was good. Full stack development: DB2 - Java - AngularJS. Java work is great. Angular work was too hectic but I learnt alot. Tool used (Development tools - H/w, S/w): Eclipse, Aqua Studio Objectives of the project: Full Stack development of a complete Module Major Learning Outcomes: Production ready coding practices Brief Description of working environment, expectations from the company: Team is good. Academic courses relevant to the project: DSA, OOP Name: Greenoe George (2015A3PS0293G)	2018- 19- sem1
Reflexis, Pune	Bug fixes in the company's product and development of DB script conversion tool Tool used (Development tools - H/w, S/w): Eclipse, Chrome Developer Tools, SVN Objectives of the project: Develop a DB script conversion tool Major Learning Outcomes: OOPs concepts, Angular, Spring framework, SQL Brief Description of working environment, expectations from the company: Software development, bug fixes and design of web pages of the product Academic courses relevant to the project: OOPs, Computer Programming, DSA Name: Kunal Sharma (2014B2A10309P)	2018- 19- sem1
Reflexis, Pune	First part was the training program which only happens for odd semester students since they teach you web development with new recruits. The second part was working as a part of the kernel team where I had to fix issues and extend the functionality of kernel product. Tool used (Development tools - H/w, S/w):  JAVA, Spring MVC, Angular JS Objectives of the project: Maintainence and extending the functionality of kernel product Major Learning Outcomes: Improvement in programming skills Brief Description of working environment, expectations from the company: It is a good company. The employees are helpful and you get to learn a lot of stuff. Academic courses relevant to the project: OOP	2018- 19- sem1
Reliance Jio	Outlier detection using time series data in Real Time Response System (RTRS) in which the count of messages (transactions) in a minute is obtained and compared with a predefined threshold. The counts which are beyond the threshold limits are selected as Outliers and a flag is raised for further analysis and helps RTRS to detect any failures in data flow before the operations team to act in real time. Tool used (Development tools - H/w, S/w): Spark, Ignite, Scala, Kafka Objectives of the project: To design an Outlier Detection model which maintains immediate consistency by monitoring and analysing data patterns in realtime by detecting delicate and unexpected changes whose root causes need investigation. Major Learning Outcomes: Building real time response systems Academic courses relevant to the project: Machine Learning Name: SATYAM KUMAR SINGH	2018- 19- sem1
Reliance Jio	Supposed to build a repository to store ML models. Tool used (Development tools - H/w, S/w): JavaScript, Thrift Objectives of the project: Add functionality of A/B testing to the project. Major Learning Outcomes: Understanding codes better. Brief Description of working environment, expectations from the company: I was placed under Couture.AI, a start-up under Reliance Jio. The mentor was not at all helpful. He himself lacked the complete knowledge of the project. Whenever approached for doubt, his only answer was "Goggle it". Academic courses relevant to the project: OOP, ML	2018- 19- sem1
Reportgarden Technologies	Quality Assurance Tool used (Development tools - H/w, S/w):  Jira,GitHub,Selenium,Capybera,Atom,Sublime,Eclipse,TestNg,CircleCi Objectives of the project:  Maintaining Technical Quality of the App through testing and automation of testing Major Learning  Outcomes: Ruby on Rails, Java and selenium Name: Ankit Anand (2014B5A30672G)	2018- 19- sem1

Company	Experience	Year
Reportgarden Technologies	I worked on two different product ClientFlow.com and Tribelocal.com. I worked with the product and marketing teams of both the product. Tool used (Development tools - H/w, S/w): Google Adwords, Various SEO tools Objectives of the project: To expand the customer base of ClientFlow.com and Tribelocal.com Major Learning Outcomes: I learnt a lot about digital marketing, both SEO and SEM and different ways of analyzing existing data to make better future decisions. Working closely with Product Manager, I learnt what can be expected of a Product Manager, and it is something I would like to pursue further. Brief Description of working environment, expectations from the company: Working environment is chill. You will learn a lot if you are allotted tech team (QA team) or product teams, not so much if you are allotted the marketing team. If you are allotted marketing team, you will have a lot of spare time and you can study for yourself. But recently, company was acquired by TapClicks, so there might be a lot of changes for the upcoming batches, and our experience in the office may not be relevant. Name: BHARATH KUMAR DEVIREDDY	2018- 19- sem1
Reportgarden Technologies	Checking whether an API is giving required data or not. Tool used (Development tools - H/w, S/w):  Postman Objectives of the project: Adding integrations into reportgarden tool. Major Learning Outcomes:  basic about ReST API, SQL, Ruby Brief Description of working environment, expectations from the  company: Work, life balance is great and people are friendly Academic courses relevant to the project:  OOPS Name: Naveen Kumar G (2015A4PS0365P)	2018- 19- sem1
Reportgarden Technologies	Qualitative and Assurance Engineer, have to test Web Application(Ruby On Rails) manually and write Automation Scripts. However the company has been acquired by an MNC(TapClicks), which is based on Php and automation is written java. Tool used (Development tools - H/w, S/w): Selenium, jira, Ruby, Ruby on Rails Objectives of the project: make sure customer faces no issues while using the application Details of Papers/patents: there was no project, we were assigned a responsibility and contribute to codeBase of the Company Brief Description of working environment, expectations from the company: Its a bitsian startup and you can find a lot of bitsians working there. The people are the best thing about this. They come forward to help you and always encourage to learn. But they don't assign you any project, you have come up with that and people are always there when you are stuck. Academic courses relevant to the project: Operating Systems, OOP, DBMS, DSA Name: P Rohan (2014B2A10907H)	2018- 19- sem1
Reportgarden Technologies	I was asked to complete a training course in Google Adwords, Analytics and digital marketing in other popular websites like Twitter, Pinterest, Instagram etc. I was also asked to do a competitor analysis which involved researching about the different market competitors to ReportGarden and analyzing and detailing their advantages and disadvantages to ensure ReportGarden could compete and excel in its field. Tool used (Development tools - H/w, S/w): Excel, SQL. Major Learning Outcomes: I learnt the basics of digital marketing and how a B2C company operates. Brief Description of working environment, expectations from the company: The working environment is professional and chill. There are plenty of Bitsians in the company who are always up for a conversation. As are the other employees. People are friendly, helpful and encouraging. There is no pressure as such with respect to the dressing code or the timings. We were motivated to pursue our own interests as well as to complete the tasks they've provided. Work never left office and all in all it was a very positive experience.	2018- 19- sem1
ReportGarden Technologies Pvt. LTd. , Hyderabad	I was the part of the Migration team which had the task to shift all the companies clients onto their new Platform from the old one as the company was acquired by US based Tap-clicks. The work wasn't much intense as they already had the new platform somewhat ready, primary work included finding major bugs and testing the new platform through recreating clients profile Tool used (Development tools - H/w, S/w): SMA, Reportgarden App, SQL, Excel Objectives of the project: Migrating Clients and recreating their data from Old Reportgarden app to new SMA app and rectifying few minor bugs. Major Learning Outcomes: basics of SQL, SEO Details of Papers/patents: Brief Description of working environment, expectations from the company: The people are friendly and there are frequent fun activities going on. You can also find few Bitsians as employees and have conversations. Academic courses relevant to the project: OOP, OS Bangalore Student	2019- 20- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	I worked in Tech team for 4.5 months and Data team for 1 month and Understanding of software and data part required by the company. i worked on adwords connector which hit API and process the data. and for other 1 month we wrote SQL query to fetch data from meta-base according to requirements Tools used (Development tools - H/w, S/w): Intellij Objectives of the project: To develop reporting modules (Connectors) for the app Outcomes of the project: Understand how to develop things and thing to take care in software development Major Learning Outcomes: Basic Understanding of Flow and back-end work in software development Brief Description of working environment, expectations from the company: Working environment was very good and helping and Better than my expectations, I got development work, which I learned from scratch and Understand how company works. Overall Experience was very good and learnt a lot during this period Academic courses relevant to the project: Object oriented programming.	2017- 18- sem1

Company	Experience	Year
ReportGarden Technologies Pvt. LTd., Hyderabad	Worked on content marketing, e-mail marketing and On & Off page SEO Tools used (Development tools - H/w, S/w): WordPress Objectives of the project: To learn various aspects of marketing Outcomes of the project: Successfully published blogs and articles and pages Major Learning Outcomes: Marketing Strategies Brief Description of working environment, expectations from the company: Working environment is very Friendly and employees helps you in every possible way. Academic courses relevant to the project: PAVA, Creative Writing, Copy Writing	2017- 18- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	Report Garden generates meaningful reports for clients. These reports are made by using third party APIs. The reporting module is being updated. I worked on Reporting v2.0. I worked on two connectors for the same. Tools used (Development tools - H/w, S/w): IntelliJ Idea, Java, Gradle, Junit, Git, GitHub Objectives of the project: Software Development Outcomes of the project: Developed two connectors for Reporting v2.0 - Google Search Console and Bing Ads Major Learning Outcomes: Application of Object Oriented programming, Developing softwares and collaborating and working with others Brief Description of working environment, expectations from the company: The working environment provides a platform to take responsibility for your work and learn in the process. The deadlines are flexible provided there is a genuine reason for not meeting the deadline. The company structure is more horizontal than vertical. Academic courses relevant to the project: The working environment provides a platform to take responsibility for your work and learn in the process. The deadlines are flexible provided there is a genuine reason for not meeting the deadline. The company structure is more horizontal than vertical.	2017- 18- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	Launching of new features for the company and taking care of requirements from product side Tools used (Development tools - H/w, S/w): SQL,Appcues Objectives of the project: Launching of new features for the company and taking care of requirements from product side Outcomes of the project: New features and improvement in earlier features Major Learning Outcomes: Product management Brief Description of working environment, expectations from the company: Working environment was good and employees of the company cooperative. Academic courses relevant to the project: Principles of Management.	2017- 18- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	Project on automation for front end GUI testing and monitoring deployments, app performance Tools used (Development tools - H/w, S/w): Ruby, Capybara Objectives of the project: Front end GUI testing Outcomes of the project: app performance Major Learning Outcomes: Git, Ruby Brief Description of working environment, expectations from the company: Git, Ruby	2017- 18- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	Implemented Features for AdFlow(Facebook AdManager) and worked on react.js FrameWork for client side and ROR framework for server Side. Also designed Validation form in front-end to make app more user Friendly. Also used Flow Redux with React.js Tools used (Development tools - H/w, S/w): software development Objectives of the project: Frontend Development of AdFlow App Outcomes of the project: App is more reliable and user friendly and have more features to work fast. Major Learning Outcomes: FullStack Development of Desktop App Brief Description of working environment, expectations from the company: work Environment is good, people are very helpful. Academic courses relevant to the project: Object Oriented Programming	2017- 18- sem1
ReportGarden Technologies Pvt. LTd., Hyderabad	I was one among the 3 interns in the Product team. I undertook multiple tasks such as MQL-SQL analysis, third party app integrations, competitor analysis, etc. The 2 projects that stood out for me, were 'user flow changes' and 'new feature addition'. In the user flow changes project, I was given a task of improving the user flow in the main feature of the app. I had to prepare a product requirement document and coordinate with the tech and design team for execution. In the new feature addition project, I handled all product aspects such as validation, making the PRD, coordinating with the tech team and design team, designing go-to-market strategy and coordinating with marketing and sales teams. Tools used (Development tools - H/w, S/w): excel, SQL Objectives of the project: Improving UX, offering a new feature to clients Outcomes of the project: The product side requirements were executed. Major Learning Outcomes: I learnt a lot about product management through the projects. Brief Description of working environment, expectations from the company: As it is a growing start-up, you'll be given a lot of freedom and will get a chance to work on live projects. For me, it was very satisfying to see something that I worked on to be added to the product and generating value for the company and the customers. The work is environement is nice. The employees are friendly. You'll be motivated to work. Student	2017- 18- sem1
Rite Infotech Pvt Ltd, Faridabad	I worked on image processing and machine learning. The company mainly deals with Financial Institutions so there is a lot of work related to image processing. Tools used (Development tools - H/w, S/w): python, an aconda Objectives of the project: detection of patterns in images Outcomes of the project: Successfully developed an algorithm that met the objectives outlined by the company Major Learning Outcomes: Learned a lot about machine learning, image processing and programming in python Brief Description of working environment, expectations from the company: It is a small company(~100 people) but the work given to us was extremely interesting. If you work regularly, you will get to learn a lot. Academic courses relevant to the project: Image Processing, Machine Learning Student	2017- 18- sem1

Company	Experience	Year
RIVIGO	Full stack development mostly backend using java and spring frameworks Tool used (Development tools - H/w, S/w): Java, Spring, React, Redux Objectives of the project: Developing various features for the company to improve overall efficiency of pre existing system. My work mainly involved backend development but i alaso worked on developing a few modular components on redux for the UI Major Learning Outcomes: Learnt about various new technologies and frameworks. Worked on spring and hibernate frameworks and data visualisation tools including superset and periscope. Developed an understanding of frontend development as well using tools like react and redux. Academic courses relevant to the project: Object Oriented Programming, Database Management Name: Samarth Sharma (2014B2A30156P)	2018- 19- sem1
RIVIGO	I have worked on JavaScript React and reduce(which is a state management library). Most of my projects here have been around frontend. Apart form this I have also worked on Google and Mapbox maps coupled with turf and leaflet. Tool used (Development tools - H/w, S/w): JavaScript React and redux Objectives of the project: To learn frontend development Major Learning Outcomes: Got to know about organization structure and how development is carried out in frontend Brief Description of working environment, expectations from the company: Very good hands on learning as major projects were assigned to me Academic courses relevant to the project: OOP Name: Vipul Singhal (2014B4A30733P)	2018- 19- sem1
RIVIGO	My work involved development of REST APIs using Spring and Hibernate framework. Beginning with understanding the product requirements, I had to prepare HLD and LLD for the features, then start implementing these features. In this process, I developed a good understanding of OOP concepts and different database systems. Tool used (Development tools - H/w, S/w): IntelliJ Idea, Spring, Hibernate Framework, AWS, MySQL, MongoDB and Redis Objectives of the project: Providing new features and improving existing ones to improve truck suppliers experience on RIVIGO Fleet app Major Learning Outcomes: Good coding practices, better understanding of OOP concepts, writing industry level code and experience with latest technologies. Brief Description of working environment, expectations from the company: Rivigo, being a start-up, has a brilliant scope for learning and executing new ideas. People working at the organisation are extremely technically competent and there was a lot to learn from them. But depending upon the project there might be hard deadlines. Overall, an intense workplace with fast-paced learning. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms, DBMS	2018- 19- sem1
Robert Bosch Center for Cyber Physical Systems ,	Project allocated here is development of text search module on IUDX catalogue. Text search is an important feature to help the customer search through catalogue for required data. MongoDB, a database management software, is used for this purpose. Vertx is a tool used to host server to help MongoDB perform search operations. Text search was implemented using Vertx based on MongoDB. Tool used (Development tools - H/w, S/w): MongoDB, Vertx, Java, OpenStreetMap Objectives of the project: Development of Text Search Module for IUDX Catalogue Major Learning Outcomes: Applications of database management systems, MongoDB, Vertx Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is good. Mentor was helpful in guidance and regarding clarification of doubts. Every person is very helpful regarding problems faced. Academic courses relevant to the project: Database management systems, OOP	2019- 20- sem1
Robert Bosch Center for Cyber Physical Systems ,	The work was related to Computer Vision and Deep Learning. I had to implement a YOLOv3 model in tensorflow, and optimize the whole model for deployment using nvidia's inferencing library, i.e. TensorRT. Tool used (Development tools - H/w, S/w): H/W - PC w/ RTX 2080 S/W - Python, Tensorflow, nVIDIA TensorRT Objectives of the project: Deployment of the Traffic Analytics Model Major Learning Outcomes: Practical usage of Deep Learning, How to tackle different problems faced during training phase of the model, Accelerating inference with TensorRT Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is very nice. People are encouraging and there are no fixed timings. Since, it's more of a research lab, the scope of learning is very high. Academic courses relevant to the project: Neural Networks and Fuzzy Logics, Machine Learning Bangalore Student	2019- 20- sem1
Rovi Corporation, Bangalore	My experience at my PS-II Station Rovi Corporation, Bangalore, involved complete and overall industrial exposure to the corporate IT lifestyle. There were no office timings, and the choice of my office timings was left up to me. In the long run, this instilled a sense of responsibility in me, since I was responsible for my working hours and completing the tasks given to me in the span of those hours. Additionally, all the projects I had done in college had never been tested in a practical environment, by actual users. I learnt here how different the practical applications are compared to the academic work done earlier. I was a part of two teams for the last 2-3 months. This taught me how to multi-task and simultaneously focus on all tasks assigned to me. Although recruited as interns, we were treated as full time employees, and hence were required to showcase similar essionalism from our end. Another major difference in developing any code/software is debugging. All the work that I did was thoroughly tested, and kept in check by regular	2015- 16- sem1

Company Experience Year

meetings where we were to share the updates on the work that we were doing. As such, any errors/bugs that were reported in testing had to be corrected by me again and again until the code was flawless. The work that I completed at Rovi belonged to the Web Development & Design domain. I had a brief understanding of the domain, but there was a tremendous amount of learning involved at Rovi, that I had to undergo before I could start actual work. The learning curve was pretty steep, and we learned how to adapt to that. The basic technologies that I had to learn were Backbone.js and Django. With a pre-existing knowledge of MySQL, I was then given full-stack web development work in one of the software's (DOM) used at Rovi. Working in the second team, also taught me a few other technical aspects in Web Development, like running parallel backend servers, to handle miniature script executions along-side the major application. I also spent a lot of time understanding Cross Domain Resource Sharing (CORS) Errors and techniques to somehow overcome that, as it was essential in the work that I was supposed to complete. Overall, besides the technical aspect, the experience at PS-II helped me attain an overall growth in all aspects of my personality. Sharvani R (2011B4A7560G) Discipline: Computer Science Working in a corporate organization can be intimidating, but the PS – II experience is far from it. The fact that we can work and be treated as employees in a corporate organization, but at the same time learn at our own pace, speaks volumes about the benefits of the PS-II program. When I first started working at my PS-II station, the transition from an academic to a workplace environment seemed daunting. There were a lot of things to take in and a lot more to learn. This program helped me bridge the gap between theory and practice. With just the right amount of help from my mentor, manager and colleagues, I gained a lot of exposure to the kind of tools used in workplaces, from Version Control Systems to all the technologies I've used this semester. Working in a team taught me the importance of collaboration in workplaces, and also helped me conform to the high standards of work expected. Brainstorming with people from diverse backgrounds (educationally) was an experience in itself – one I strongly believe taught me to consider all possibilities before embarking on a new task assigned to me. I was a python novice before this semester, but I can say with conviction that I've gained enough experience writing code in python to be able to confidently write a few lines of code without consulting Google or Stack Overflow. The leap from the constraints imposed by Java (my language of choice and iciency) to the freedom provided by python scared me to death initially, but after 2-3 mini projects written completely in python, I don't feel the same way anymore. I learnt how to create ontologies for natural language query answering, write Flask applications to provide services, make my code readable, document it and many other things. The second half of my semester involved feature selection, which I have theoretically explored on campus, but had an opportunity to work on it hands-on, and most importantly, required me to use my put my knowledge of both my disciplines in practice. This program has definitely enhanced my knowledge base, and improved my future career prospects. B. Varsha Rao (2012C6PS317G) Discipline: Information Systems Interning in Rovi Corporation, Bangalore as a part of Practice School -2 was an amazing experience. Having learnt the basic courses of Computer Science in college, this experience provided a platform to practically implement our knowledge. My major learning experience was in the field of Web Development. This was one area that I had hugely neglected back in college as I thought it was very trivial and not really necessary for my growth. But after coming here I realized how heavily dependent industries are on this skill and that it is no child's play. It requires a lot creativity, design aptitude and knowledge in the field of JavaScript and the large number of supporting frameworks available today. I realized academic learning is of no use if practical application was not involved, and this is what I learnt to do here, in the 5 ½ half months I spent in Rovi Corporation. My learning began with brushing up of complete basics of Web Development that is, HTML, CSS and JavaScript. Since the product I was working on used backbone.js at the front-end, I began learning backbone mostly through the code used by Rovi and on-line tutorials. This process took about a week after which I began coding by taking up very small tasks which took quite some time initially till I got used to it. As my iciency increased I learnt a lot thing like code optimization, and looking for loopholes in the current code. I was able to point put my own mistakes while coding and correct them immediately. This gave me a lot of confidence. After doing a few tasks in the front end I went on to learn django web framework and code in python. This gave me exposure to back-end development. And I learnt to look for new features to implement and optimize existing features. I also learnt to work in a team and be able to estimate my own progress as we had to constantly provide ourselves with practical deadlines. The valuable experience I gained by working has definitely enhanced my knowledge base to great extent and has improved my future career prospects by gaining valuable industrial experience. Vikas Bhatt (2012A7PS039G) Discipline: Computer Science My experience at Rovi Corporation was full of learning. I thought the transition from academia to the industry would be scary, but the PS -II program made it an easy one. My take back from this program is the following: I learnt a lot of things, from using basic linux commands to version control systems. I got to do a lot of work in C, which definitely enhanced my understanding of the language. I learn to use the GNU Debugger to ensure my code works properly. I also learnt to work in a team and work within the deadlines imposed by the corporate lifestyle. I mainly worked on increasing the functionality of a custom server. It was too much to handle at first, but with the right amount of help from my manager, and mentor, who let

Company Experience Year

me figure things out, I gradually got comfortable with the system. This will definitely help me in my future endeavors.

1. First project was to develop a tool, management information system, that would streamline the process of keeping track of the progress on all client engagements across all locations in India. 2. Second project was to automate the JE-CAAT documentation process. This will help the firm save more than 2000 man hours every year. 3. Next was to automate the management information system dashboard refresh as and when the changes are made to the data source. 4. Apart from this we did Client work where our job was to assist the audit teams by analyzing the JE and TB data to test completeness of the data and to generate exception reports. We used various tools such as SQL, Audit Command Language, Monarch, Global Analytics Tool etc. for this analysis. Tools used (Development tools - H/w, S/w): R Programming, SQL, VBA, Tableau, Audit Command Language, MS Excel, MS Access, Data Collector, Monarch, SAP Objectives of the project: Business Development- Automation of redundant internal processes, Client Work Outcomes of the project: Tools developed for business development enhance the team's efficiency by saving more than 3000 man hours every year. Using these tools implies minimal human intervention and hence improves the accuracy as well. Major Learning Outcomes: As a part of the Data Analytics Team, working on various projects helped me gain technical knowledge of R, SQL, VBA etc. and tools like Tableau and ACL. Working with huge amount of data gave me hands-on experience and an insight into what issues one might face when dealing with data of this scale. Apart from the technical knowledge of various tools I used, imperative soft skills I learnt here is what I would rate highly. Working with one of the big-4 firms, I learnt how to conduct myself in a professional manner, deal with people, manage crunch situations, manage time, manage quality of work and other cognitive skills. Brief Description of working environment, expectations from the company: Being member firm of EY, working environment at S. R. Batliboi is not different from what one would've heard. The work atmosphere is very friendly and positive. Working with the team is a lot of fun along with tight work schedule. Academic courses relevant to the project: Fundamentals of Finance and Accounting, Financial Management, Data mining. Faculty Comments: Expectations from industry: S.R. BatliBoi is a company which focuses on Audit and analytics. The interns will be working on descriptive/diagnostic analytics in Advisory and Assurance Services line. Knowledge of analytics which includes statistics, databases, machine learning and programming (coding) skills is expected from the

students. The company provides a good exposure to many of the latest technologies and tools. Student

2017-18sem1

Sabre Holdings (Formely Sabre Travels), Bangalore

S.R. BATLIBOI & CO. LLP.

Bangalore

2015-16sem1

My PS-2 program at Sabre Travel Technologies in the GetThere team was one of the best periods in my graduate study that I would cherish for a long time. It is a complete package any student would aspire to have before one starts his/her essional career. Sabre embodies the true global characteristics in a local atmosphere with great excellence. The PS-2 program is well structured, extensible, and intensive with a lot of learning opportunities. The project that I was a part of was very exciting, providing me an opportunity to learn and apply cutting edge software technologies in various projects. My Manager, my mentor and other team members were very open, friendly and helped me realize my potential. My role in this team as software developer was to develop a mobile app for GetThere using HTML, CSS, JavaScript, Angular JS, Cordova, MySQL, PHP etc. which involved the following: 1) Integrating the existing mobile UI of GetThere in the app 2) Creating an auto-login feature after one login 3) Adding new features to the app like managing and storing trip specific expenses and contacts for corporate travellers. This internship at Sabre also emphasized on being a complete essional who has both technical and business acumen. A competition "Global Hackathon" was organized for all the employees and interns to showcase and implement their hack ideas and present it in a 3 minute long video. I was overjoyed to work along with my fellow interns and my mentor on a challenging hack idea. This Global Hackathon project was the highlight of my internship with great mentoring support, interviewing and sharing ideas with top executives of the travel industry. We secured the 2nd position in Global Hackathon under the 'Payments' category which is a proud moment for me and my teammates. I was amazed to experience the close knit culture that Sabre embraces, where an intern like me was able to meet top executives and openly share ideas. Sabre is a great place to work with amazing work-life balance and is constantly striving to be the number one in travel industry through various initiatives. I also had great time at Team lunch outings and various team building activities. Apart from the technical projects, I was also a part of the organizing committee for Employee Development Day and Sabre India's 10 year anniversary celebrations which were a huge success. I amaze myself every single day with the amount of ways I see myself maturing and growing into the type of essional woman I've always admired. Lastly, my PS faculty Mrs. Preeti N.G. was very supportive and provided her continuous guidance and encouragement in successful completion of my Practice School at Sabre in a smooth fashion by conducting timely evaluative components like quizzes, group discussions, presentations and report submission which helped me a lot to enhance my technical skills as well as soft skills. This unique experience at Sabre has been totally rewarding, enriching which is a big stepping stone towards my essional career. Without any doubt I would recommend this to any student who wants to learn, explore and enhance his/her academic skills and more importantly apply those skills in the corporate world. Sugandhita

Company Experience Year

(2011B1A8674G) Discipline: E&I My Practice School 2 at Sabre Holdings, Bangalore began on 6th July 2015 with my placement in the Host Tools team of the Product and Technology staff group of Sabre. Mainly, a TPF tools development team, they gave us a brief introduction on the work of the team, its significance for the Sabre community and the plan for our internship. One major form of assistance that we got from our team was in terms of training sessions in the first month for the major technologies used by them – Java, MySQL, Flex, Apache Tomcat and JDBC Drivers. Being completely new to the domain of Web Development, this with some small assignments really piqued our interest. Self-study was encouraged by our team-mates and doubts were effectively and promptly clarified for our projects further. I have learnt a lot of technologies in a few months and built a certain level of iciency in them. This definitely bolsters my technical skills which were at a very basic level as I was academically an Electronics student. My project work was to solve the performance issues of a web application used by the QA teams at Sabre and add further useful features to enhance its functionality. I had to learn 7-8 technologies for this web development task. I had to also understand various other tools used by the QA teams which are used as sources of data for this web application. My peers got work ranging from building Android apps to Junit testing, so there was a plethora of work to choose from and learn.. Our mentor, Mrs. Preeti NG, was supportive of all our activities and motivated us for participation in addition to making sure that our project work would never suffer. She also helped us in developing soft skills by giving us some teambuilding and organizing work in addition to smoothly conducting all evaluation components. I have had a great experience which has built my confidence in terms of solving real-world problems through technology and interaction with my peers and superiors. PS-2 is honestly the time at which you can control your own learning curve and assimilate as much knowledge and industrial culture as possible for your selfdevelopment and easy transition to the industrial world as a responsible employee Sunandan Gokhroo (2012A3PS688G) Discipline: EEE Everything we do in life is affected by our past experiences. The results of the past shape the decisions of the future. But there are some things which require spontaneity or rather it's the only option. It's good, it's exciting but it can't always ensure success. Sitting for campus placements or getting out of the college and searching for jobs often ends up being sudden and unplanned for most of us. Keeping that in mind, BITS has designed the Practice School Program. Practice schools allow students to have a trial run at industry life while still being a part of the college. This is something exclusively offered to its students by BITS Pilani. Not only do these Practice Schools offer a rare opportunity to experience industry life before actually being a part of it ,but also to learn newer and exciting technologies while working in the industry. They offer work experience to shape future career decisions. Personally this has helped me further my skills to a newer level. I have had many opportunities to learn and work with technologies, which I haven't used before. This has been tremendously helpful, as I come from a non IT background but with a love for IT. Being a part of SABRE, India under the guidance of Mrs. Preeti NG has been one rare opportunity where not only have I developed my technical skills, but also my non-tech skills, which I learned from my industry experience, are equally important. This experience has allowed me to broaden my career prospects as well. I believe the skills developed here will definitely allow me to think far and beyond the conventional job opportunities. Other than the expansion of knowledge PS offers something very important and unique, which I believe is of importance above all, Soft Skills. Today industry needs people who are not just good at their work, but also have excellent Communication Skills, Team Work, Adaptability as well as Conflict Resolution. These skills can't be found in any books, these can only be learned through practical experiences. Being part of a team, solving problems together, managing things under pressure and then presenting the results in front of all the leaders with high expectations from you is something that college life can't offer. The Practice school program solves this problem very efficiently. It's also very important to understand that PS is not some sort of isolated experience, where you are cut off from your college. On the contrary it's a rare amalgamation of both which is very diligently ensured by the PS instructors. It is ensured that the learning at the industry is relevant as well as beneficial to the student. PS can be effectively summarized as a crash course to industry life, where you not only learn technical skills but more importantly life-skills. You develop a new viewpoint like never before, a viewpoint honed by practical experiences. These experiences are crucial to shaping one's ideology and hence a personality, that is ready to be a part of something more, something bigger.

Sabre Holdings(Formerly Sabre Travels), Bangalore Automation of Test scripts Tools used (Development tools - H/w, S/w): QTP, ALM Objectives of the project: -To automate the test cases received from the manual Q/A's Outcomes of the project: Submitted the test suites and are accepted by the CAT team Major Learning Outcomes: VB scripting, knowledge about QTP tool Brief Description of working environment, expectations from the company:Friendly and accepting environment. Not much work pressure. Helping Employees.

2016-17sem1

Experience Year Company Functional testing and Automation of the testing procedure for Air Vision Fares Manager Application by SABRE. Majority of the work was focused on writing scripts to automate various test cases designed for the application screens. Execution as well as Debugging of the already existing and new scripts to generate standardized reproducible results in the form of Log Files. Tools used (Development tools - H/w, S/w): HP-UFT(Unified Functional Testing), HP-ALM(Application Lifecycle Management), SQL Developer and Wrapper classes with VB-Scripting, SVN-Tortoise. Objectives of the project: Automating the testing process for faster results, reduction in cycle time and improvement in the quality of testing. Creating new scripts and simultaneous execution. Merging Repositories of all the scripts to one final root repository and checking in the changes through TortoiseSVN. Updating the ALM and recording the results in the form of Log Files. Execution of Wrapper class for hassle free launch and run of the scripts. Outcomes of the project: Created over 80 scripts for the Fares Manager Application and executed them successfully. Major outcome would be the increase in the percentage of Automation concerning to the Fares manager application. Creation of a single root repository for all the scripts by merging the local repositories of each script. 2016-Sabre Holdings(Formerly Launching the testing process in a single step using the wrapper class. Major Learning Outcomes: VB-17-Sabre Travels), Bangalore Scripting, using Wrapper classes, testing methods using UFT, starting and terminating the servers on sem1 various databases. Brief Description of working environment, expectations from the company:SABRE is a wonderful place to work as a Full-Time Employee. It recently received the award for being one of the GREAT PLACES TO WORK in INDIA. However, I feel the company lacks a concrete policy for Interns (Not everyone knows how to use a intern). An Intern's work depends on his field(Dev/Testing) and the team he's allotted. Working on the product directly gives a good firsthand experience about the present Tech scene. SABRE has a very bad hiring policy: extension of Internships over a long period of time is a stalling and bad way to treat interns without converting them. This is the first time they had CS students as interns and yet didn't convert a single student upon many requests from the teams as well. Work culture is amazing and you have the flexibility to approach anyone for any help. In short: Great place to work, Amazing culture, team spirit is immense, extremely friendly and supportive co-workers, bad intern policy, not so good for learning new technologies. Company has flexible work hours and expects you to set your own deadlines and stick to them. They extend great facilities and extremely useful incentives for Employees and Interns(Limited). My first assignments were to identify defects in code and fix them. This helped me understand how good coding practices contribute towards maintainability. Also, I was exposed to a number of new languages, coding methods, testing frameworks and software utilities. My Assignments varied from developing tools, fixing bugs, developing a testing framework and also an analytical tool. I was assigned to develop an interactive user guide, fix a utility code in C++, develop a testing framework using selenium and testing, and developing an analytical tool on the elastic stack. Tools used (Development tools - H/w, S/w): Smart GWT, Tiddlywiki, Selenium WebDriver, TestNG, Elastic Stack, Apache POI Objectives of the project: -Fix defects in a code Develop an Interactive User Guide Develop a testing framework for Data Validation Develop an Analytical tool on the Elastic stack Outcomes of the project: Interactive User Guide Framework for Data Validation Performance Tracking on Elastic Stack Major Learning Outcomes: Good Coding 2016-Sabre Holdings(Formerly Practices Exposure to various frameworks on JAVA Working with the Elastic Stack Brief Description of 17-Sabre Travels), Bangalore working environment, expectations from the company:Sabre has a very warm and welcoming working sem1 environment that is easy to adjust. The mentors and managers are very supportive and help you through the transition from a college going kid to a person in the professional world. The flexible working conditions only add to an advantage. The work culture here is amazing enabling a smooth transition and in learning and understanding the high standards of a professional environment. All interns are involved like any other employee and work is assigned as a team, which enriches team spirit. Well, an intern at Sabre is expected to learn rather than perform and people here are always there for you when you want to push your boundaries and take an extra step. At Sabre, I have discovered a lot about myself and improved a lot of areas in which i considered myself weak. Similarly, i got strengthen myself in the areas i was good at and showcase my skills. In short, it was an amazing experience that made me realize the potential I had. Quality Assurance of Airline Solutions products Tools used (Development tools - H/w, S/w): HP-ALM, UFT Objectives of the project: -Automating of Test Scripts Outcomes of the project: Automation Scripts were 2016-Sabre Holdings(Formerly sent to Central Automation Team for regression tests Major Learning Outcomes: Quality Assurance of 17-Sabre Travels), Bangalore Software Products Brief Description of working environment, expectations from the company: Good work sem1 environment, approachable employees

Company	Experience	Year
Sabre Holdings(Formerly Sabre Travels) , Bangalore	I have continued the development of Automation tool which they use, I fixed issues and added few enhancements, In the end worked on regression testing due to loss of resources in the team. Tools used (Development tools - H/w, S/w): Python, Django Objectives of the project: To make the automation tool free from issues Outcomes of the project: Automation tool is more reliable and working more effectively with free from issues Major Learning Outcomes: Development and Design of Software/Web Server Brief Description of working environment, expectations from the company:Sabre is a company with lot of flexible benefits. Every intern is treated equal to employee and we even got the work employees are working on. My manager Vivek Gupta gave me lot of nice challenges to work on. He is always supportive and helped me if face any issue all the way. My team people are very encouraging and they would explain me with such patience if i have any doubts. My PS-2 faculty Vineet Garg, is also extremely helpful whenever we faced any issue.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	I have created an offline tool to obtain specific data from new ICE web service, parse and store the data. And enhanced VCMP distribution functionality to distribute images with room type codes and HD360 Images to all downstream systems Tools used (Development tools - H/w, S/w): JAVA, Spring Framework Objectives of the project: -The objective of the project is enhancing the Visual Content Management Platform for the new and more powerful web services provided by ICE and providing the original functionality with new ones such as room type codes, HD360 Images, Videos etc. Outcomes of the project: After this VCMP enhancement, it provides more information to the downstream systems which in turn helps the end customer in their purchase. Major Learning Outcomes:I learnt Web Technologies such as JavaScript, JQUERY, Servlets and got efficient working on Spring framework. Brief Description of working environment, expectations from the company:The working environment and expectations completely depend on the team we work in. The timing in our team were a bit flexible and colleagues always ready to help. I worked on the ongoing live projects at the company, so was expected to work quite a lot.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	I worked for a team which develops front end for PMS V4, a web application for hotels to manage inventory and reservations, guest profiles, staffing, back office and payment system integration. Tools used (Development tools - H/w, S/w): React JS, a JavaScript library, and HTML, CSS, Spring Tool Suite(STS), Tomcat Server. Objectives of the project: -Developing UI for a huge web application. Outcomes of the project: Product ready UI Major Learning Outcomes: I Learned React JS with my previous knowledge of HTML, CSS. Brief Description of working environment, expectations from the company:The work environment is encouraging to Interns. The HR changed my team when i complained regarding the nontechnicality of my project, that explains the work flexibility and giving preference to employee's satisfaction.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Project was on automation of deployment of a product using Continuous Integration tool Team city. The automation was done using Maven (XmL Scripts). The preprocessing included setting up ssh Daemon in windows and Cygwin for remote execution of commands in windows virtual machine with Teamcity agent being the host of execution. Tools used (Development tools - H/w, S/w): Maven, Intellij Idea, Teamcity, Cygwin, mRemoteNG Objectives of the project: Continuous Integration till the deployment of application. Outcomes of the project: Can have automated deployment of application using a trigger every day. Major Learning Outcomes: Networking, XML, Maven, SSh'ng. Brief Description of working environment, expectations from the company:Working environment was good, mostly helpful but they don't have a well-defined system as to what type of work to be given to interns. A lot is dependent on which team you get into. Many at times it will be you who will be asking for work.	2016- 17- sem1

Company	Experience	Year
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Had to migrate script from QTP to Selenium testing framework. Here we had to write automation script in Gherkin Language with JAVA glucode(back end JAVA code) which can run on " selenium testing framework". Also, had to do testing of the product both manually and through automation. Also Contributed to Get There product Release. Participated in Global Hackathon (an annual Hackathon at Sabre which gives a platform to the employees to put forth path breaking innovating ideas, which can be translated into some product roadmap). Also, participated in Big Pitch (generally for disruptive business ideas focused towards the travel industry). Tools used (Development tools - H/w, S/w): Selenium, Cucumber, Eclipse, JAVA, maven, Apache, etc. Objectives of the project: -Quality Assurance of GetThere Product (migrating script from QTP to selenium testing framework) Outcomes of the project: Migrated script from QTP to selenium, participated in Release Support, did testing, etc. Major Learning Outcomes:Learned Gherkin, write script for selenium testing framework, participated in release support, participated in sabre Global Hackathon Brief Description of working environment, expectations from the company:The automation script which I wrote will reduce tests time execution and human resources required. It will also enable complete control over the tests results (actual results vs expected results). And can quickly change test preconditions and input data, and re-run the tests dynamically with multiple sets of data. I did testing of these scripts also. Contributed in GetThere Product Release Support. Participated in Global Hackathon and Big Pitch Event and gave partially implemented product which can be converted into Sabre Product.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	While working in Sabre for different teams in both Development and Testing, I have understood how every process in designing, testing and deploying a software is important to assure quality and usability of an application. The main objective of my project is to write Fitness Fixtures and Test Cases. Fitness is mainly for Acceptance Testing. There is a new version of the product to be developed in the coming days so Fitnesse Test cases will play some important role in checking the functionality of the product and finding errors during the development stage. Tools used (Development tools - H/w, S/w): Selenium, Fitnesse, IntelliJ, ApachePOI, JAVA Objectives of the project: -The main objective of my project is to write Fitnesse Fixtures and Test Cases which will help in Testing the product in the initial stages of development itself. Outcomes of the project: The work I have done during the PSII is useful for Acceptance Testing while Developing New Product. I have written Fitnesse Fixtures for the application in JAVA.I have also written many Fitnesse Test Cases related both to the Fixtures that I have written and the for Fixtures that are already present. Major Learning Outcomes: One assignment has given me exposure to Selenium Web driver, which is popularly used in testing web based applications. Also, I learnt using Apache POI which is a powerful tool, which can read from and write into files. Apache POI is a powerful utility that can be used along with many programs giving them a way to take in Input and record Output. The other assignment which is my project has given me exposure to Fitnesse which is used for Acceptance Testing. I have learnt writing Fitnesse Fixtures for an application. I have also learnt writing Fitnesse Test Cases which helps to build the right code. Brief Description of working environment, expectations from the company:The happiness while working in Sabre comes from its work culture. The relationship between mentor and intern is very friendly that interns call their mentor as "Buddy". This	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Worked on reports mostly and quite a few times on Intellij Tools used (Development tools - H/w, S/w): SQL, JAVA Objectives of the project: Developing a software Crew Manager Brief Description of working environment, expectations from the company:One of the best PS for Bitsians.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Quality Assurance Automation using C# and Selenium Tools used (Development tools - H/w, S/w): C#, Selenium, MbUnit Objectives of the project: -Automation of Test Cases for Guest Connect Quality Assurance Outcomes of the project: New Test Cases were Automated and Pass rate during Regression Testing was kept above 90% pre-release Major Learning Outcomes: Experience gained in working with a team, in Selenium, in Testing Brief Description of working environment, expectations from the company: Quiet working environment, with interns being treated as equals to employees and responsibility given to interns to govern and monitor themselves.	2016- 17- sem1

Company	Experience	Year
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Recognizing and distributing revenue shared between Aircraft carriers in less than few hours. Tools used (Development tools - H/w, S/w): S/w: JAVA, Spring Framework, Hibernate, Quartz, Camel Frameworks etc. Objectives of the project: -Recognizing and distributing revenue shared between Aircraft carriers in less than few hours. Outcomes of the project: Decreasing the current revenue management by 48 hours. Major Learning Outcomes: Technologies used in IT industry. Brief Description of working environment, expectations from the company:Working environment is very friendly with very liberal deadlines, completing the above said project are the expectations.	2016 <sup>.</sup> 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	I have worked with Sabre in Shared Systems Development, primarily with the GDS Ticketing team and Airline Ticketing Team. As part of my project: 1) I have worked on Test Automation using JAVA and VBscript, creating, updating methods and specializing in tools such as HP UFT and Para soft SOA. 2) Worked on Regression Testing, Automation and gained hands on experience with the best Testing methodologies followed in the industry. 3) I have worked on several automation projects during my tenure at Sabre. This helped me to develop a sound understanding of Sabre GDS (Global Distribution System), Ticketing and Travel domain in general. 4) We (A team of 3 Interns) have developed a small tool which could help reduce time taken for Test Automation to about 60% as part of the Sabre Global Hackathon. Tools used (Development tools - H/w, S/w): HP UFT, HP ALM, Parasoft SOA Objectives of the project: Regression Testing and Automation in various ongoing company projects Outcomes of the project: Automated 300+ Test Cases and Created 10 new functions in the central library and tweaked many others Major Learning Outcomes:Got hands on Experience with UFT, VBScript and General Regression Testing methodologies Brief Description of working environment, expectations from the company:Sabre's work culture impressed me with the flexible work timings and Employee first approach. My Team mates at Sabre were extremely enthusiastic and helpful. Had a great time working there and a steep learning curve made it invaluable to my budding career.	2016- 17- sem1
Sabre Holdings(Formerly Sabre Travels) , Bangalore	Developed the code of various web services. Worked on two main projects and a lot of smaller projects and assignments. Projects assigned varied from high priority (development of Security Rules for web services) to different types of assignments (code review, analyzing code flow like Business Analysts etc.). Tools used (Development tools - H/w, S/w): Languages - JAVA with Spring mvc, JAX-B, JUnit, Maven, SQL Software - Soap-Ui, Intell-J, SNTE, Babun, Win-SCP, Dev-SQL Objectives of the project: -Project 1: Developed all the security rules for pnr-display web service for migration of logic from PSS to Open Systems in order to save transaction costs. Project 2: Introduced new type of Special Service Request (BRND) through update reservation web service to the Open Systems. Outcomes of the project: Successfully completed both main projects assigned to me along with successfully completing all the other tasks/ assignments. Major Learning Outcomes: Learned various coding techniques, new coding languages (spring mvc, JAXB), new software (SNTE, SOAP-Ui, Intell-J), learnt the way a corporation works and handles projects (Sprint planning and Agile). Brief Description of working environment, expectations from the company:Assignment of team totally depends on LUCK. If assigned the team/work of your interest, very good place for work. I was assigned my favored designation of developer. Working environment is pretty good and interns are treated equally like Full Time Employees. Other employees are very helpful and lot of learning opportunities. Great Work-Life balance and numerous of recreational activities to keep engaged (Foosball tournaments, Hackathons, CSRs). Faculty The company works in a very niche area of software for security, storage, backup and availability. Managers and mentors encourage students to explore this area and permit time to become comfortable with the domain. Students had opportunities to work in the area of digital certificates, user authentication in the cloud scenario, secure web transactions etc.	2016- 17- sem1
Samsung Bangalore	Studied technologies used in Automatic Speech Recognition. Learned about various models like RNNs, N-gram, Vector Embeddings(Word2Vec, Bag of Words), SNMLM Tool used (Development tools - H/w, S/w): Python, SRILM, pycharm, C++, eclipse Objectives of the project: Corpus enhancement, SNMLM model implemention Major Learning Outcomes: Working knowledge of NLP, ASR Brief Description of working environment, expectations from the company: Highly permissive and stress free working environment with a lot of people always ready to help. Academic courses relevant to the project: Machine Learning Name: Rajat Pandey (2014B1A30245P)	2018 <sup>.</sup> 19- sem1
Samsung Bangalore	Currently major work focuses on developing 5G model Tool used (Development tools - H/w, S/w): C language commercial coding on eclipse Objectives of the project: Developing 5g model Major Learning Outcomes: Currently debugging work is going on Academic courses relevant to the project: Fibre optics, digital signal processing Name: Kartik Kulgod (2015A3PS0266G)	2018- 19- sem1

Company	Experience	Year
Samsung Bangalore	Verification of LTE features using Simulator Tool used (Development tools - H/w, S/w): C, Python Objectives of the project: To test software running on processor for errors using Simulator before being released to. Academic courses relevant to the project: Computer programming Name: Shubham Gupta	2018- 19- sem1
Samsung Bangalore	Developed a KPI Analysis tool for statistical and correlation analysis of data from various network operators. It also included some ML/AI features for anomaly detection. Tool used (Development tools - H/w, S/w): R language, Selenium, RStudio Objectives of the project: Development of the key features of KPI Analysis Tool Major Learning Outcomes: Team work, proficiency in R Shiny, Selenium Brief Description of working environment, expectations from the company: Good place to work. But projects are alloted randomly. Also, more than 50% of students don't even get any work. I was lucky enough to get some good work. Name: Utkarsh Tiwari (2014B4AA0929H)	2018- 19- sem1
Samsung Bangalore	Training, testing and improving the accuracy of the 'Attention based RNN model for joint intent detection and slot filling' using the data set provided by the voice assistant. Tool used (Development tools - H/w, S/w): Python, Tensorflow Objectives of the project: Training, testing and improving the accuracy of the model Major Learning Outcomes: Natural Language Understanding using Python and Tensorflow Brief Description of working environment, expectations from the company: Project was great. Got to work in the field of NLU, and in the process studied Machine Learning, Deep Learning. The mentors, the manager, and the employees were very supportive and provided all the help necessary to accomplish the task. The only downside is that you have to complete 9hrs/day even if you don't have work. Academic courses relevant to the project: Machine Learning, Artificial Intelligence, Object Oriented Programming Name: Dhruv (2014B4AA0687H) Tool used (Development tools - H/w, S/w): Microsoft visual studio, Android studio, open cv, opengl Objectives of the project: Embedded Realization of Point Cloud Compression Major Learning Outcomes: Learnt the whole compression pipeline Name: P V Nikhilanj (2015AAPS0190H)	2018- 19- sem1
Samsung Bangalore	Achieved state-of-the-art results on stereo depth estimation task using deep learning Tool used (Development tools - H/w, S/w): TensorFlow, Blender Objectives of the project: State-of-the-art results on stereo depth estimation task using deep learning Major Learning Outcomes: Learnt ML research, dataset creation, teamwork Details of Papers/patents: Paper submitted in ICME 2019. Brief Description of working environment, expectations from the company: The working environment is good. All the higher-ups, from VP to mentor were all very friendly, helpful and co-operative. Resources such as GPUs are abundant. Expectations from the company – Good work, Helpful managers, good environment overall. However, getting a PPO is relatively difficult. Academic courses relevant to the project: Machine Learning, Image Processing, Computer Graphics Name: N Raghav (2015A3PS0134G)	2018- 19- sem1
Samsung Bangalore	Started with a basic understanding of server concepts. Used PHP and Spring for testing. Studied various tools like Postman, Fiddler and Wireshark. Understanding and implementation of DNS Proxy servers using DNSJava. Created a few test applications in Android. Tool used (Development tools - H/w, S/w): Android, PHP, Spring, Postman, Fiddler, Wireshark Objectives of the project: Decrease latency and increase throughput of the network using the concept of Mobile Edge Computing Major Learning Outcomes:  Learnt about the working of DNS and its proxy servers. Basics in Android, PHP and Spring. Brief Description of working environment, expectations from the company: The working environment was good. There's this 45 hours a week policy for employees which they're strict about. Initially it seemed a bit too much, but most students get used to it. One negative thing is the heavy bias shown towards the students from Pilani campus in terms of the CTC of the job offered. Academic courses relevant to the project: Computer Networks Name: J Lakshmi Sravani (2015A7PS0033H)	2018- 19- sem1
Samsung Bangalore	My project was on transfer learning. I had to implement the whole model using tensorflow graphs and sessions. It was research oriented. Tool used (Development tools - H/w, S/w): Tensorflow, python.  Objectives of the project: Research on the concept. Major Learning Outcomes: Improvement in accuracy Brief Description of working environment, expectations from the company: Team which i got allotted was very good and friendly. They work and play hard. Academic courses relevant to the project: Machine Learning, Information retrieval. Name: Aakriti Saraf (2014B4A30927H) Tool used (Development tools - H/w, S/w): H/w System Verilog Objectives of the project: Performance Parameters Major Learning Outcomes: Linux verilog magillem Gvim Academic courses relevant to the project: Computer Architecture Name: Patlori Samaritha (2014B2A30916H)	2018- 19- sem1

Company	Experience	Year
Samsung Bangalore	Wi-Fi sharing is a feature which helps sharing a Smartphone's Wi-Fi connection with other devices over Wi-Fi. This feature requires a smartphone to simultaneously act as both Wi-Fi Station and Access Point. Wi-Fi sharing involves routing of traffic at the IP protocol. As the IP layer is present in the Application processor, such traffic gets routed from the Application processor. The purpose of this project is to offload such traffic from the Application Processor to the Wi-Fi chip during Wi-Fi sharing; whenever there is no considerable user activity. This helps the Application processor to go to the low power mode and the connectivity processor will handle the routing of data between connected Wi-Fi clients and the internet. Tool used (Development tools - H/w, S/w): Eclipse, Android Debug Bridge (adb), Wireshark Objectives of the project: To exclude Application processor as a functional entity for internet access in the Wi-Fi subnet (when Wi-Fi sharing feature is being used). This helps in lowering power consumption. The trigger for offload is the absence of user activity on the device. Major Learning Outcomes: Revision and strengthening of technical knowledge. Learning the approach to be followed towards a technical project. Expanding coding skills. Exposure to professional world. Interactions with the experts in the field. Time management. Academic courses relevant to the project: C programming, OS, Communication Networks, Microprocessors & Interfacing, Analog & Digit VLSI Design Name: Prathyusha Vedulla (2014B1AA0714H)	2018- 19- sem1
Samsung Bangalore	Worked on CMOS image sensors. Image processing on verilog and hardware design of bad pixel correction module. Power reduction and optimisation of the module. Tool used (Development tools - H/w, S/w):  Verilog, PRIMETIME PX Objectives of the project: To improve bad pixel correction in camera modules.  Major Learning Outcomes: Camera sensors, Image quality improvement, power measurements in real time, rtl design, punctuality. Brief Description of working environment, expectations from the company:  My team was the CMOS image sensor team. The team was very dedicated to delivering on time and hence the environment was serious and demanding. I learnt a lot during the internship from the team even though my interaction was limited. Academic courses relevant to the project: Computer architecture, Digital signal processing, digital design, micro processors, micro electronic circuits.	2018- 19- sem1
Samsung R &D Institute - Image & Video Processing,	Work is on android app development. Its a research project on device's Al. Tools used (Development tools - H/w, S/w): Android Studio, Notepad++. Objectives of the project: Create an Al on device. Outcomes of the project: An Al that helps the user Major Learning Outcomes: Android app development. Brief Description of working environment, expectations from the company: Working environment is employee-friendly. Every floor has a pantry, where you can rest, chill and have coffee. Academic courses relevant to the project: Object Oriented Programming, Machine Learning.	2017- 18- sem1
Samsung R &D Institute - Image & Video Processing,	Compiler Tools used (Development tools - H/w, S/w): Visual Studio Objectives of the project: Source Code Translation from Microsoft UWP to Tizen. Outcomes of the project: A POC level tool to translate basic applications Major Learning Outcomes: Detail view of compiler functioning and application of advanced data structures. Brief Description of working environment, expectations from the company: A healhy team environment, with helpful mentors and managers. However the company rules sometimes hinder the overall productivity. Academic courses relevant to the project: Compiler Construction	2017- 18- sem1
Samsung R &D Institute - Image & Video Processing,	Source code translation from windows uwp to tizen Tools used (Development tools - H/w, S/w): Visual Studio Objectives of the project: Source code translation from windows uwp to tizen Outcomes of the project: POC level tool that can translate UI elements as well as .CS files Major Learning Outcomes: Compiler construction. Brief Description of working environment, expectations from the company: COMPANY DO NOT TREAT ALL THREE CAMPUSES ALIKE, They offer less half of the ctc that is offered to BITS PILANI, PILANI Campus. Academic courses relevant to the project: Compilers	2017- 18- sem1
Samsung R &D Institute - Image & Video Processing,	Learnt about neural networks - both theoretical and application based. Created a model that could predict a sentence based on input hints. Tools used (Development tools - H/w, S/w): Tensorflow, Python, Nvidia GTX 1080 Objectives of the project: Saving user time while accurately performing the intended action Outcomes of the project: A basic "Proof Of Concept" model Major Learning Outcomes: Everything from training a neural network to taking it into production. Brief Description of working environment, expectations from the company: Good environment, flexible work hours. Very helpful and friendly mentor/managers. The company expects you to explore the basics of your projects, not just the implementation. Academic courses relevant to the project: Machine Learning, Artificial Intelligence	2017- 18- sem1

Company	Experience	Year
Samsung R &D Institute - Image & Video Processing,	I worked on android mainly, using broadcast receivers to gather user activity, and wrote machine learning algorithms for it. Tools used (Development tools - H/w, S/w): Android studio, jupyter Objectives of the project: My project was on intelligent battery alerts. It was an Android based project in which I had to give charging alerts based on user activity. Outcomes of the project: It solved the problem of user forgetting to charge phone by reminding the user to charge when at a chargeable location Major Learning Outcomes: I learnt productionisation of machine learning algorithm in android. Brief Description of working environment, expectations from the company: The work culture at Samsung is a bit stringent. Every employee mandatorily has to complete 45hrs a week during weekdays. The team atmosphere is good, mentors and managers are really supportive and help bridge the knowledge gap needed to implement the project. Academic courses relevant to the project: Machine learning, data structures and algorithms	2017- 18- sem1
Samsung R &D Institute - Image & Video Processing,	The quality of work here in Samsung depends a lot on the team that you are allotted to. For the most part, you have no say in what team you are allotted, so I'd say it all depends on luck. While some people have actually had the opportunity to work in fields related to cutting edge futuristic technology, I was stuck with working on how to adapt an automation software called Autobot. Neither was the work interesting, nor did I learn anything exceptionally good. As for the culture, it is quite fun to be in Samsung. If you are really interested in IT field, Samsung is a good place to be at. Tools used (Development tools - H/w, S/w): Robot Framework Objectives of the project: To adapt a Robot Framework based tool in order to automate small cell testing Outcomes of the project: Successfully installed the framework Major Learning Outcomes: Python, Robot Framework Brief Description of working environment, expectations from the company: Working environment is very good and fun. Student	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	The objective was to identify if the system is running in a single threaded mode and take an appropriate scheduling decision to get performance benifit without much or zero power penalty Tools used (Development tools - H/w, S/w): Jupyter Notebook, Jig box, Trace-cmd Objectives of the project: To enhance user experience via improved scheduling of Single Thread use cases Outcomes of the project: 5 percent improvement in System performance Major Learning Outcomes: Kernel Programming Brief Description of working environment, expectations from the company: The work environment is quite good and flexible thus encouraging learning and innovation Academic courses relevant to the project: Operating Systems, Machine Learning	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Developed and implemented a robust mechanism to detect any soft lock up in the system and catch the responsible thread and take necessary action to recover from it. Tools used (Development tools - H/w, S/w): Linux Objectives of the project: To enchance the stability and reliability of Tizen RTOS. Outcomes of the project: TizenRTOS was successfully auto-detecting any soft lockups in the system Major Learning Outcomes: RTOS, Linux, Github, Kconfigs Brief Description of working environment, expectations from the company: The company needs you to work for 45 hours a week, failing which results in deduction in stipend. Mentors and Managers are allotted who are very helpful and are very supportive throughout the project. Other team mates also help you understand the project and what exactly manager is expecting from us. Overall a very good experience. Academic courses relevant to the project: OS, Microprocessors, C programming, DSA	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Worked on developing a Neural Network based Text Prediction Model used in mobile devices for Hindi language. My project included training the model, testing the performance and integrating it on device. Tools used (Development tools - H/w, S/w): Python, Tensorflow, C++, Java Objectives of the project: To develop a language model for hindi language with performance comparable to the english counterpart. Outcomes of the project: The major portions of the project was completed. the performance was improved but we were not able to reach the performance figures for English. This is mainly due to structural and morphological differences in Hindi and English. Major Learning Outcomes: I learned the whole process of language modeling and how neural networks are the major focus in the field of machine learning. Brief Description of working environment, expectations from the company: The work environment and culture at Samsung is excellent. People are quite friendly. There are so many facilities that are provided to the interns compared to other PS stations. Overall it was a amazing experience. Academic courses relevant to the project: Machine Learning.	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Develop machine learning algo for ondevice-ai,prediction of app,self driving bot Tools used (Development tools - H/w, S/w): Python,Android Studio,Eclipse,Spyder,Pycharm Objectives of the project: Reinforcement learning Outcomes of the project: App prediction model Major Learning Outcomes: ML,Android,Python Brief Description of working environment, expectations from the company: Working environment is good but a little strict for timings as it has 9 hours policy for daily but a lot to learn as it is r and d center with great projects. Academic courses relevant to the project: Machine learning,OS	2017- 18- sem1

Company	Experience	Year
Samsung R &D Institute - Software Systems, Bangalore	Detection and Inpainting of eye using Machine Learning Approaches Tools used (Development tools - H/w, S/w): Python Objectives of the project: Applying machine learning methods over image processing ones in the existing systems. Outcomes of the project: Learnt about Convolutional Neural Networks for Eye Detection Major Learning Outcomes: Knowledge about Convolutional Neural Networks Brief Description of working environment, expectations from the company: The company expects the student to give their 100 % which helps the student in learning the concepts and their application in depth Academic courses relevant to the project: Machine Learning, Non Linear Optimization	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Language Modelling done using Machine Learning more specifically using RNNs and LSTM Networks Tools used (Development tools - H/w, S/w): Python Objectives of the project: Natural Language Processing and Text prediction Outcomes of the project: Text Generation and Prediction of the next word given that a user types in a certain paragraph(a context). Major Learning Outcomes: To use machine learning models for learning (or training) the data that user types in and using this data to recognize the context. Brief Description of working environment, expectations from the company: The work environment is excellent. There would be a leaning curve and after that you are expected to meet certain deadlines. Samsung also has flexible timings and our colleagues are also friendly and will guide in every step. Academic courses relevant to the project: Machine Learning, Neural Networks, Information Retrieval.	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Software development Tools used (Development tools - H/w, S/w): ML, Android studio Objectives of the project: Use phone storage more efficiently Outcomes of the project: Detected junk files present in the phone Major Learning Outcomes: Learnt ML Brief Description of working environment, expectations from the company: Great project and very nice working environment Academic courses relevant to the project: ML, DSA	2017- 18- sem1
Samsung R &D Institute - Software Systems, Bangalore	Acceleration of programs based on deep learning using parallel processing on GPU. Used Open Cl to program GPU. Tools used (Development tools - H/w, S/w): C++ Objectives of the project: Acceleration of programs based on deep learning using parallel processing on GPU. Outcomes of the project: Measurable increase in performance and identification of further optimisations required. Major Learning Outcomes: GPU programming Brief Description of working environment, expectations from the company: Very well working environment. Pleasant colleagues who supported me in any doubt I had regarding the project. Academic courses relevant to the project: Machine Learning. Student	2017- 18- sem1
Samsung Semiconductor India R&D Center-Hardware ,	I was in Analog Chip Designing Team. The first project was about the simulation and analysis of Error Amplifier used in Buck Convertor. All its parameters and specifications were determined, like Stability Margins, PSRR, Open Loop Gain by doing DC, AC, and Transient analysis. The second project was about the Analysis of the Power Stage of the Buck Convertor, where I found the dead time, efficiency of the power stage for a given duty cycle and the losses that occur in the power stage. Tool used (Development tools - H/w, S/w): Cadence-Virtuoso, Simulation and Analysis Environment, Custom Wave Viewer, Linux Objectives of the project: To understand as to what all things are kept in mind by a designer while designing any circuitry which is chosen to accomplish any particular functionality Major Learning Outcomes: Came to know as to why that design for Error Amplifier and Power Stage was chosen. My analysis gave an insight to Samsung as to what all things need to be kept in mind while Designing Power Stage and Error Amplifier for Buck Convertor. Details of Papers/patents: Brief Description of working environment, expectations from the company: The work culture was quite good. A mentor was assigned for me who would guide me in doing simulations required for doing the project and also for making testbenches required for the simulation. PPO will depend on your performance, how independently you can work, how well are you able to meet deadlines, all these things do matter. In Analog Teams, they generally look for experienced and learned people, so you would need to be thorough with your technical knowledge in Analog Domain and show them that you are quite interested in working in this domain, if at all you get to work in an Analog Team. Academic courses relevant to the project: Power Electronics, Microelectronic Circuits, Analog Electronics, Analog-Digital VLSI Design	2019- 20- sem1

Company	Experience	Year
Samsung Semiconductor India R&D Center-Hardware ,	I was a part of Flash Memory IP Verification team and I worked on the formal verification of debug structures, to verify whether the debug information from the internal logic is available at the output of registers based on programmable selections. The intent was to automate this process and lower the dependency and unnecessary troubles of using simulation based methods. Tool used (Development tools - H/w, S/w): UVM, SimVision, JasperGold Objectives of the project: Automate the verification of debug structures by using Formal verification tool Major Learning Outcomes: Got to know about Formal Verification and its benefits over traditional simulation based verification techniques. Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is good. They treat you as an employee from the first day itself (don't worry, not in terms of expectations but in terms of accesses provided)! You will be provided enough time to get accustomed to the tools and to learn what you need to learn. Be professional, work hard to prove your worth to the corporation and rest assured that you will reap what you sow! One thing I would like to point out is that SSIR generally announce PPO results for BITSians around May. So if you are interning here from July-December, you will get your PPO result only at the end of next semester (even if you are a single degree student)! Academic courses relevant to the project: Digital Design, ADVD	2019- 20- sem1
Samsung Semiconductor India R&D Center-Hardware ,	Inferencing and acceleration of pre-trained neural network models on Android devices can be done using Neural Network API. NNAPI provides a base layer of functionality for higher-level machine learning frameworks such as Tensorflow Lite. The tflite model for image classification is inferenced on CPU, GPU and other hardware accelerators. Also I did some scripting work. Tool used (Development tools - H/w, S/w): Android device, Command shell, C++, Python, Bash Objectives of the project: Inferencing of neural network models on Android device Major Learning Outcomes: Inferencing of neural network models on Android device Details of Papers/patents: Brief Description of working environment, expectations from the company: The team members are willing to help and it's a good environment to learn and explore new things. Academic courses relevant to the project: NA	2019- 20- sem1
Samsung Semiconductor India R&D Center-Hardware ,	I have been working in the IP development of Samsung Semiconductors. Initially, I worked on some samsung tools and then I have worked with Analog IC design team. I have worked on development of 6-bit R-2R ladder DAC to study if its performance is better than the one they are currently using i.e R ladder DAC. Also, some statistical analysis is done to check stability and required precision for the DAC. After that, I have been given small tasks like apl and lib generation. Tool used (Development tools - H/w, S/w): Cadence development tool, Crossfire, Silicon Smart, Redhawk-Apache, Linux. Objectives of the project: To study the R-2R ladder DAC and its performance in comparison with R ladder DAC. Extension of 6-bit DAC to 8-bit and further to check for its precision and stability with statistical analysis. Major Learning Outcomes: IC design, IP development, workflow in the semiconductor industry, steps followed in developing a design. Details of Papers/patents: None. Brief Description of working environment, expectations from the company: There is good working environment and technical culture. There are always some sessions and activities going on which help us to learn new things and explore. There are also some special HR sessions for support. All the employees are friendly and are willing to help in case we have any doubts or queries. I really enjoyed working with these people here at samsung semiconductors and learned a lot of new things and practical application of things I learned. Hence, people who want to build career in the semiconductor industries, this should be their number 1 choice for their practice school station. Academic courses relevant to the project: Analog Electronics, Analog and Digital VLSI Design.	2019- 20- sem1
Samsung Semiconductor India R&D Center-Hardware ,	I was a part of the storage controller team within Memory division. This team works on implementing and testing different storage protocols which shall, I guess, later be used in Solid state drives (SSDs) produced by Samsung if the results of testing are satisfactory and meets the market requirements. I was a part of a live project from day 1 and involved with generating header files to be used for firmware, testing the protocol on FPGA boards and learning various tools on the go. Tool used (Development tools - H/w, S/w): Xilinx Vivado, Vivado Lab, SDK, Magillem, Visual Studio Objectives of the project: To test a new link layer protocol, with NVMe as the standard application layer protocol and check it's feasibility for commercial use in the years to come Major Learning Outcomes: Learnt various HW and embedded SW related tools. Details of Papers/patents: - Brief Description of working environment, expectations from the company: The company is very good. Work load depends on the team. If the team feels you are working efficiently, you'll be given further tasks and that should be a good indication for you to understand what the team thinks of your performance. Academic courses relevant to the project: Microprocessors and interfacing, Computer Architecture, Digital Design, Mobile Telecommunication Networks. Student	2019- 20- sem1
SAP Labs, Bangalore	Discipline: Computer Science This Internship is my first experience at an IT company. I gained a lot of confidence and it also helped me understand the working style of the corporate based companies. Initially I had some problems adjusting to the team but later with their constant support I have been able to successfully complete my tasks. My work at SAP is developing an internal SAP portal to automate the One-Time IP Scan Requests. The Platform for development is Grails Groovy. HTML, CSS, Java Script and Angular	2015- 16- sem1

Company Experience Year

JS are used for frontend. Technically I have been much more comfortable effectively completing the given tasks. My team is an inter-continental team including the teams at Germany, China, Canada and India. I have been exposed to tackle the situation of being able to handle the pressure and the absence of team members in the team in India. This gave me a great insight into making decisions by myself and increase my soft skills presenting on the platforms like skype for business. This Internship helped me decide to pursue masters before in hands experience of work. As for me I am not able to study while working, Hence I thought of completing my master's and then start to work. Akshita Tyagi (2012A7PS119G) Discipline: Computer Science My PS-II project was on SharePoint App-Part model - Research and Development. It was a very good learning experience for me. The fact that I could contribute to an industry level product instilled a great sense of confidence in me. New technologies which I have learnt during the course of internship include Restful Web Services, JSON format of communication, JavaScript, HTML, CSS and dotnet application Development. The innovation projects brushed up my java skills which included front end development in html and JSP files and JDBC connection and communication with the backend SQL database. Whereas, in App-model development, Front - end is CSS, HTML and JavaScript coded which makes a call to restful APIs using JQuery ajax commands with json being the data format of communication. Basically, it gave me an overview of web application development to quite an extent. Apart from the development, I had to conduct an extensive research on the previous architecture of our product's integration with SharePoint which helped me in learning c-sharp and debugging dot-net applications. In college academic, we learn each of the components of product development separately, during the internship we get to combine all those concept and try to shape them to the useful component of the product. Now, that we are able to create something substantial it boosts the confidence and prepares us for the upcoming interviews. As, a product enterprise is trying to adopt newer technologies always, I got to learn new technologies and got to implement them as well. These, and a lot more are the learning I am taking away from this internship. I hope my contribution was credible to them as well. The previous SharePoint integration has serious installation issues for the customers and debugging issues for the developers. So there are a lot of customers looking forward new model of SAP Business Objects integration with Sharepoint. With the prototype being successfully implemented they can now launch it in their 2016 version release. Ambar Mehrotra (2012C6PS596G) Discipline: Information Systems Practice School 2 has taught me a lot of things including various new technologies as well as how to work on a big project with a lot of people. It also taught me how to communicate effectively the requirements to various other people involved in the project as well as take their help. All this learning made me familiar with how the work goes on in a large scale industry. I got to know about the various tools and techniques used to make the work more convenient and collaborative development. My main work included solving customer related issues and writing scripts for automating various things. I worked with technologies like Java, .NET framework, C#, PowerShell and python. My work helped me enhance my coding skills as well as gave me knowledge of various new technologies used frequently in the industry. It also taught me how to effectively log the useful information and error messages. This knowledge will be greatly helpful for me in my future endeavors. I also learnt how to integrate systems running in two different stacks and run them seamlessly. I learnt about tools like splunk, SVN, Crucible, Confluence, JIRA, etc. These tools are used in almost all the industries for effective and collaborative development. The knowledge of these tools will greatly help me in future projects as well. I also worked on writing a script for integrating these platforms and generating an integrated set of information to avoid the hassle of going to various places for various kinds of information. It also helped in regulating the check-ins that are going in and alerts the right people if some check-in has gone in without any code review. This helped me to get familiar with the subversion, crucible and JIRA APIs. It also helped me get a better understanding of REST APIs and how to work with them. Also, I learnt a lot about writing scripts for automating tasks. Another major thing that I learnt from my PS-II experience was the importance of the code reviews. Proper code reviews are absolutely necessary before the code is checked in. These reviews should also need to happen from a number of people instead of a single person as it will help bring out the fault in the code for sure. Checking the code for errors is of utmost importance in any kind of software development scenario and it becomes even more important if multiple people are working on the same project and changes made by one person may affect the ones made by others. Apart from work I also had a lot of fun at my PS-II station and enjoyed my duration here. This experience helped me improve my personality as a whole and helped me learn how to interact with people in a much better way. Anurag Hota (2011B5A7411G) Discipline: Computer Science I came across a lot of open source software. I learnt about Apache Camel and how it helps in the flow of exchange from a source to a sink, yet having a very low memory footprint. I then learnt about the OsGi framework, Felix and how it helps in deploying bundles at the runtime. I developed some OsGi based bundles having Camel routes in it. I also learnt how to write Junit Test Cases and wrote the test cases for all the components I made. It did improve my java skills a lot. SAP has really helped me in tuning my coding skills. Now I know the dos and don'ts of writing production environment code. It has helped me write error free codes with exception handling etc. Moreover continuous seminars have improved my speaking and presentation skills.

Company Experience Year

The experience has actually helped me in understanding the need of the customers and the requirement of the current industry. Now I know what all takes for a software to be released adhering to all security standards, bug solving, PMD trends, fortify fixes, coverage of the Junit test cases etc. As I mentioned earlier, I have improved my advanced java skills. I can easily write error free codes with exception handling and security standards etc. Moreover, I have learnt about Apache Camel, OsGi framework Felix, Tyrus (Websocket Library), Maven etc. I was lucky to have a project on Internet of Things (IoT). This is one of the fields that is on rise in the industry and I am lucky to have developed some components for the IoT Connector. This would definitely give me a lot of scope in the industry. I developed the deployer component for the IoT Connector 2.0, which is responsible for lifecycle management of all the components in the framework. I also developed the monitoring component which monitors the performance of all the components. I wrote Joint test cases for the same. Rajat Gupta (2012A7PS096G) Discipline: Computer Science Working at SAP is always an opportunity to learn the latest technologies. Various backend tools that are being used in various service-oriented companies are built and improvised here. Working in HANA CLOUD PLATFORM (HCP) team adds an edge to your experience. SAP has a really great work culture. Within SAP, one can really enhance his/her knowledge by cross-team working. My Project is totally different from the work that my allotted team is doing. This project actually aims at growing SAP in new direction. Its objective is to use chatting for triggering various functionalities based chat semantics. An Android App is built based upon few targeted use-cases. Learnings in this project include Android App Development, Web Sockets, Web Services (RESTful services). Being part of such an employee-friendly organization helps in building personalities. Various qualities that one learns are punctuality, meeting deadlines, presenting idea, and building business model of the work. College to Company life involves an immense change in your behavior. This 5 months internship gives you considerable exposure of industry-life. Few things that I personally have experienced in last 5 months includes that it might be a bit difficult to ramp up in an organization during initial phase to match their frequency but gradually that difference decreases with one's effort and determination to learn new stuff. The best way to get maximum output is to keep on learning new technologies and try to work on different platforms to remain updated. In achievements, the Android App that my team is developing is selected for HCP Demo Jam 2015. This is one of the 11 projects that would be showcased all over SAP. Team work, organized structure and support from peers sums up to this success. Siddhartha Sahai (2012C6PS672P) Discipline: Information Systems The BIP Server team is a highly motivated and productive team to be working with, and by working on these projects with my team members, I have learn a lot about the architecture of the Business Intelligence platform, and the design process in general of major software products. I have learnt about the phases of development of multi-million dollar enterprise solutions, how many stages are there in the product lifecycle, the importance of feedback from customers, and the need for software maintenance after its release. I've learnt of the need for constant testing and integration to ensure high code quality. I understand the significance of why so many people are needed for building and maintaining software – because software is hard and complex, it is easy to introduce bugs, and non-trivial to collaborate on major features on large codebases. I understood the need for HR and IT and other departments, to help in the smooth functioning of a large number of employees. By participating in daily Standup Meetings to share our progress, I realized the value of essionalism and teamwork in industry. I definitely saw the discipline needed in industry is different from that in academics – reliability and collaboration is a must. I will take back a strong sense of discipline and direction while working on projects, to constantly evaluate myself on my progress as well as have constant communication with team members so as to build up a positive momentum. I have gained relevant technical experience in Java and C++, along with a confidence to work on major enterprise products supporting many users. I have learnt the use of tools for collaboration and workflow, along with principles of Business Intelligence platform. SAP Labs is a prestigious organization that is an asset to my resume. A major achievement was successfully showing a Proof-Of-Concept modification to the existing codebase that reduced the upload time of logging files by a factor of ten.

Sattva Consulting, Bangalore Conducted a detailed research and recommended sustainable changes in existing policies of largest NGO in child rights domain Created Employer-Educator-Trainee Linkages and designed operational plan of project SelectHER. Understand the challenges of women in the workforce and conducted ground research from India's 25 top retail stores. Recommending relevant organizations and their projects for optimum utilization of CSR Portfolio of corporates. Tool used (Development tools - H/w, S/w): Tableau Objectives of the project: Addressing complex societal challenges Major Learning Outcomes: Helped organisations design and execute inclusive models that are innovative, economically viable Academic courses relevant to the project: Cultural Studies, DYSOC Name: Shivam Monga (2015A1PS0659G)

2018-19-

sem1

Company	Experience	Year
Sattva Consulting, Bangalore	In initial 1 month, did secondary research on FPOs (Farmer Producing Organisation) & SHGs (Self Help Groups) & prepared a Data Grid consisting various attributes for intervention by the Organisation. Later on, shifted to Knowledge vertical of the organisation, where i assisted in "OECD DAC surveyfor Indian Private Philanthropy for Development" & "State of Everyday giving in India." Tool used (Development tools - H/w, S/w): Excel, Tableau. Objectives of the project: 1. To carry out intervention program by organisation 2. To prepare a consolidated report for OECD DAC surveyfor Indian Private Philanthropy for Development 3. To prepare a consolidated report on "State of Everyday giving in India." to Bill & Melinda Gates and Nilekani Foundation Major Learning Outcomes: Major learning outcomes were how organisations deal with large CSR money amounting to crores. Brief Description of working environment, expectations from the company: The organisation is a Consulting firm handling large CSR projects of MNCs. There are various verticals, namely, Knowledge (which i was allocated to), Strategy Consulting, International, Solutions, Talent search. Knowledge Team got a lot of work for interns as an Analyst doing extensive Primary & secondary research. Academic courses relevant to the project: Principal of Management. Name: Suvam Ganguly (2015A5PS0935P)	2018- 19- sem1
Sattva Consulting, Bangalore	My work has been end to end management and implementation of a skill enhancement training program from mobilization of the candidates to hand-holding of them. I have been actively involved with all the stakeholders, from the clients to the on ground partner organizations through regular communication as well as understanding their needs and then make actionable recommendations wherever it is required. Tool used (Development tools - H/w, S/w): MS Excel, MS Power-point Objectives of the project: Skill enhancement and generation of income/livelihood Major Learning Outcomes: Program management, Communication & interpersonal skills, Developing proper clarity of thoughts, Articulation of thoughts, Time management. Brief Description of working environment, expectations from the company: The work environment is simply brilliant. All the people are very friendly and approachable in case of any doubt irrespective of the position in which they are in. They provide proper feedback for each and every work done. Academic courses relevant to the project: Financial Management, Copy- writing, Public Administration, Technical report writing Name: Parth Madan (2014B1A40787G)	2018- 19- sem1
Sattva Consulting, Bangalore	Worked with the international business team on consulting assignments with social enterprises in India. Sample projects include: 1. Sales and Marketing Strategy for an innovative farming system manufacturer in Uganda 2. Gender Assessment Study for a social enterprise in Burkina Faso 3. Mapping the Grant Landscape for a social enterprise working with small holder farmers Tool used (Development tools - H/w, S/w): Microsoft Excel, Microsoft Powerpoint, Tableau, Data Collection Tools - Collect Objectives of the project: To increase the outreach and revenue of social enterprises based in Africa Major Learning Outcomes: 1. Understanding of the Grant/Funding Ecosystem in Africa 2. Demographic conditions of Agriculture in Africa 3. Innovations addressing agricultural issues and ability to refine distribution channels Brief Description of working environment, expectations from the company: Extremely welcoming environment, high level of ownership if you demonstrate interest and ability to work. There is a lot of diverse and interesting work happening here. Ideal for people looking to be part of the social sector Academic courses relevant to the project: Dynamics of Social Change, Principles of Management Name: Manish (2015D2TS0990P)	2018- 19- sem1
Sattva Consulting, Bangalore	Project 1: Ignitia Partnership:- We looked for organizations (Developments banks, RFPs, Social enterprises) who provide funds, grants, and awards to small-medium enterprises (SMEs) matching the requirements for ignitia. Basically, Ignitia's focus was on the agriculture, climate, water, and gender theme. An organization must have offices/working with any other enterprises in the ignitia region. We also looked on the previous projects they have funded, what was their funding amount and who funded them. We collated all the data on a spreadsheet and analyzed the sheet. Finally, we have some organizations who met all the expectations of Ignitia and we would able to deliver the sheet to organizations. Tool used (Development tools - H/w, S/w): Ms-Excel, Google Slides, Canva, Google Spreadsheet Objectives of the project: To deliver highly localized, accurate weather forecasts via low-cost SMSs (\$0.03/day), helping small-scale farmers manage daily activities that depend on rainfall to increase crop yields Major Learning Outcomes: I was able to know about how organizations work, How to present yourself in that situation. Apart from that I also learned about the factors on which we can design the market and competitive landscape of any organization. Brief Description of working environment, expectations from the company: Sattva Media and Consulting has a very good work environment. I found all the people very helpful and such a talented people. They always have good and healthy discussions over drinks and food which I like the most. I got the opportunity to work with different teams which helped me a lot to gain organizational knowledge and also boost to my confidence. As a day scholar, Sattva helped me a lot to have a good command on my communication skills which is also a great achievement for me. Sattva has everything that I was expecting although it has more than that. Academic courses relevant to the project: Public Administration, Development Theories	2018- 19- sem1

Company	Experience	Year
Sattva Media & Consulting Pvt Ltd , Bangalore	I was part of a project with one of the leading philanthropic foundations in the country. My work involved analyzing the market's current landscape, conducting secondary and primary research and creating appropriate analysis frameworks for the collected data. In addition to that, I was also part of the deliverable preparation team, wherein I was entrusted with writing major sections of the final report, and providing support to my team members, wherever necessary. Tool used (Development tools - H/w, S/w): Microsoft Office Social Cops Zapier Pipedrive Objectives of the project: To create a toolkit that would inform the ecosystem players about a specific phenomenon in the giving market Major Learning Outcomes: I got to work extensively on my problem-solving skills, and have definitely come out with a more analytical frame of mind than before. I feel that it was a great experience in terms of exposure in a field that I want to pursue in my future. Details of Papers/patents: As part of the project, we prepared a DIY toolkit and a larger report to analyze a particular funding technique for SPOs to leverage, in order to raise more funds. Brief Description of working environment, expectations from the company: The work environment at Sattva is definitely very employee-friendly. Although the offices have shared work spaces, this induces discussions and interactions between everyone, hence improving one's interest in the work. Moreover, because of the conduction of regular update meetings and catch-up sessions, one feels connected with the company and the work that they do, and hence drives further to bring impact. Academic courses relevant to the project: If the empathetic part is to be concerned, it would definitely help for one to go through more Humanities courses, for they provide you a social angle to problems. In addition to that, it would definitely help if the university would bring in more proble Student	2019- 20- sem1
Searce, Pune	Google Cloud Platform - solve client queries Tools used (Development tools - H/w, S/w): SSH, Compute Engine, Putty, ping, telnet Objectives of the project: To solve client queries Outcomes of the project: Solved client queries Major Learning Outcomes: DevOps in GCP, Professional Communication Brief Description of working environment, expectations from the company: PC was provided. Company expected that client queries be solved. Student	2017- 18- sem1
Servicenow Software Development India , Hyderabad	The project aimed to develop a tool to do sentiment analysis of Slack Channels, Facebook posts and Portal Feedback. The whole aim was to develop a data-driven feedback mechanism so that it helps in making better decisions. I used Keras and Tensorflow to develop a neural network that could predict the sentiment of any sentence. The model was also interfaced with ServiceNow's platform. Tool used (Development tools - H/w, S/w): Python, Powershell, JavaScript Objectives of the project: To do sentiment analysis of the Slack channels, Workplace comments, portal feedback and all other relevant sources. Major Learning Outcomes: Learned about creating ML models, powershell scripting. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work Environment is good as expected. If project is related to the team's work, people will give sufficient attention on your work. Office culture is peaceful. Academic courses relevant to the project: Basic ML knowledge is required, along with a decent skill level in Data Structures.	2019- 20- sem1

Experience Year Company I worked on two projects in my PS2. The first one revolves around making an app that autofills the onboarding forms, through pictures of ID cards. OpenCV in python and java for image processing, microsoft azure's REST call for OCR, and the widget in the front end were used. For the classification of different types of ID cards through OCR, cosine similarity and template matching were used. An in-house OCR server using Flask, running Tesseract, was also built in CentOS. The java class was exposed to the Rhino. Few images were also trained, as template detection. The other project involves image processing too. The aim was to recognise the structure and fields, and the key and the value pair, of a form. The form may be handdrawn, or printed, empty or filled with all kinds of information. The contours are found using opency, and processed using different algorithms and novel transformations. Using a new technique that I developed, the application can intelligently recognise the contours, and map it accordingly to the texts, even for handdrawn dummy forms. Django in CentOS along with Django Rest framework were used as backend, and Servicenow Software widget with JS and AngularJS was used in the front end. There are few elements of NLP too, while parsing 2019-Development India, the texts. Tool used (Development tools - H/w, S/w): Microsoft Azure apis, Flask, Django, Jupyter, 20-Hyderabad Tesseract, CentOS in VM, OpenCV, Matlab Objectives of the project: The main objective was to develop a sem1 product that might help with the user experience and the workflow; using OCR, what all different things that can be done. Major Learning Outcomes: Analysis of data, proper pipeline creation, presenting and pitching while giving demos, integration of different technologies together, developing a product with the client side usage in mind Details of Papers/patents: An existing image processing algorithm on transformations was modified accordingly to recognize intricate shapes Brief Description of working environment, expectations from the company: The working culture is good, help is always available, and all the facilities needed for a good work life balance is given, including many perks. Because of this, the expectation is reasonably high, as the work involves product development, and it also demands good presenting and pitching skills. Frequent standups and demos would be asked, for proper selling of the product. Academic courses relevant to the project: OOPs, OS, Image Processing, DBMS, ML, Data Mining, Communication and Networks I had been taken into a team named Service Portals which comes under emerging interfaces(A platform of Service Now) where I was helped the team solving the bug fixes and involved in the writing automation test cases Tool used (Development tools - H/w, S/w): Eclipse IDE, Visual studio code, Service Now Servicenow Software Platform Objectives of the project: To resolve the bugs that causes the product defects Major Learning 2019-Outcomes: Javascript, Selenium, HTML, CSS, Angular JS Details of Papers/patents: Brief Description of Development India, 20-Hyderabad working environment, expectations from the company: The coworkers were so friendly and interactive, sem1 helped and guided me throughout the past 6 months a lot. It was my immense pleasure to work with this peers Academic courses relevant to the project: Data Structures and Algorithms, Object oriented programming Student When a user of the Solid Edge platform saves its 2D/3D design from Solid Edge file format to a neutral file format the user wants all the information of its design to remain unchanged. I made necessary changes in the existing code base to test the working of the translation process .I added test cases and ATP (Automatic testing platform) for the added test cases on a host application to verify the translation process and I also implemented ATP framework for data migration from Solid Works to Solid Edge and 2019-Siemens PLM Software, added test cases to test the migration process. Tool used (Development tools - H/w, S/w): Solid Edge, Solid 20-Pune Work Objectives of the project: Reduction in manual testing time, Regression catch Major Learning sem1 Outcomes: C++, Soft skills- Teamwork, work ethic, responsibility, time management Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is very conducive and people in the company are helpful and easily approachable. Facilities such as gym, food and transportation provided by the company are good. The weather of Pune remains pleasant most of the time. Academic courses relevant to the project: Object Oriented Programming

Experience Year Company My first project was Adding / Improving (the efficiency of) features to Active Workspace based on user requirement. Active Workspace is one of the major products of Siemens. It is an intuitive user interface that connects to Teamcenter and lets you view and create data in your enterprise's product lifecycle management (PLM) system. First feature was to restore a product session in Active Workspace based on user input such that when the product is opened for the first time it opens in Default Configuration and next time is automatically restored. Defaullt Configuration is the one already defined by the framework. Second feature was to pin elements / products in Active Workspace such that element along with its parent object is pinned to the home-screen. On opening the pinned configuration, it should be restored back to the point where it was pinned which included the base element with its entire configuration. Second project was using various Profiling Tools in Visual Studio in order to track the CPU and Memory Usage of various blocks in Active Workspace server side code in order to optimize the same . Tool used (Development tools - H/w, S/w): Programming Languages Required: Angular JS, C++ Tools: Microsoft 2019-Siemens PLM Software, Visual Studio, Visual Studio Code. Objectives of the project: Implementing new features in the web-client 20-Pune (Active Workspace) and Profiling, Optimizing the server code for Active Workspace. Major Learning sem1 Outcomes: Usage of Delegates in json. Deep understanding of Service Oriented Architecture. Client-Server framework . Frontend and Backend development . Details of Papers/patents : Brief Description of working environment, expectations from the company: Great working environment! The team along with the employees are extremely supportive and ready to help at any point of time although they do expect you to take initiative on your own . Excellent place to work in terms of work life balance and have lenient time restrictions. If you are really enthusiastic about taking up a certain project you can negotiate with the HR people and they pretty much allot the kind of work you would prefer. The company has scope for both datascience (Machine Learning etc ) as well as Software Development . Academic courses relevant to the project: OOPs (in c++ preferred), JavaScript / AngularJS, Data Structures & Algorithms Brief write-up on PS-II station: All three station had different work environments, manufacturing and production, aurangabad- skoda chakan- localisation and indigenous products development, Mumbai- sales services and marketing, lots of excel sheet analysis part Student BackEnd Developemnt, Product development Tools used (Development tools - H/w, S/w): Ruby, Sql, AWS services Objectives of the project: To design a new product for the organization Outcomes of the project: Schema to hold the data of the organization, new products base work Major Learning Outcomes: Ruby, 2017-SQL, Working with a group in developing code Brief Description of working environment, expectations Siftery, Bangalore 18from the company: The Work Culture is the best, the employees are very encouraging and helpful, and help sem1 you throughout the course of internship. Doubts are actively encouraged and you are treated on par with an employee and are given responsibilities as such too. Academic courses relevant to the project: OOP, **DBMS** During my internship at Siftery I was assigned three major projects. The objective behind this project is to generate a real time mapper on sitestacks that can in a few minutes crawl a particular url for the stack technology being used and generate a response for the user. The mapper will be coded on a separate server which will act as an external api for sitestacks. The mapper has to be extensive and detailed in its response while maintaining a low latency. By introducing this feature and a products page which will cater to the need for product vise data for users, we hope to make sitestacks a very promising Siftery product. Another project was focused on increasing the quality of Siftery data and their Graph Universe. The retry logic was a sort of a look back mechanism where the data from previous crawls were compared and any incoherent data found was recrawl to avoid any false positives. The third and the last project dealt with reducing the crawl time of the Company. The complete web crawling took about a week to complete and the project objective was to reduce this time. Tools used (Development tools - H/w, S/w): Rails 5, 2017-PostgeSQL, Mongo DB Objectives of the project: Working on the web crawl architecture of the company, Siftery, Bangalore 18thereby making it efficient and fast. Outcomes of the project: As a result of the work done, the crawl time sem1 was reduced significantly and the Graph quality was enhanced. Major Learning Outcomes: After the completion of my internship at Siftery, I can say without doubt that I have gone on to become a better programming, a team player and most importantly a better professional. Brief Description of working environment, expectations from the company: PS II was great learning process for me. Working at Siftery was a great experience as we shared a lot responsibility and sense of ownership in the area we started working. In the past few months I have pushed thousands of lines of code into production and it feels amazing to see, the features I worked on being used by so many people around the world. At Siftery, they treat you like full time employees and give you a lot of responsibility from day 1. It's pretty challenging and at same time fun too. The start up is one of the fastest growing companies in India and I would recommend tech enthusiasts to definitely consider it as an internship option. Academic courses relevant to the project: OOP, DBMS, CP Pune Student

Company	Experience	Year
Skoda Auto	Worked closely with the Aftersales field team. The entire data of the region will be handled by the intern in the department. Tool used (Development tools - H/w, S/w): MS- Office,Qlickview Objectives of the project: Minimize the concerns and increase customer satisfaction Major Learning Outcomes: Taste of management field. Academic courses relevant to the project: SCM, Optimization Name: Gyandeep (2015A4PS0353P)	2018 19- sem1
Skoda Auto	Analysis of many campaigns and reports, preparation of dashboards and many other works. Tool used (Development tools - H/w, S/w): Excel tools Objectives of the project: Involved in the project which they were making Major Learning Outcomes: Got to know a lot about excel and many SAP softwares. Brief Description of working environment, expectations from the company: Corporate style, lenient and working before the computer. Name: Akshit Makhija (2014B4A40465G)	2018 19- sem
Skoda Auto	I worked in the Sales department at North Zone Office of SAIPL at Gurgaon. My mentor was Mr. Navneet Trehan, North India Sales Head. The main work done in the duration of PS2 was dealership management and Sales Planning/Analysis. After initial training, i was made the Area Sales Manager of Agra dealership. The work included interacting with Active prospects, making sure the dealership is handling them properly, and the Sales target is achieved. Also, i was given Project Synergy, the aim of which was lead generation through workshops. Triggers and Barriers report was also completed through regular interaction with customers and surveys. Tool used (Development tools - H/w, S/w): Microsoft Excel, Power-Bi Objectives of the project: Retail Targets and Project Synergy Major Learning Outcomes: Flow of information of best practices of both departments is essential for building customer confidence in the brand. Team working & cross functional co-ordination. Brief Description of working environment, expectations from the company: The work environment is great. The office is located in gurgaon and accessible from everywhere through metro. You don't get food at the office but you can order and eat. The office is shared by skoda and volkswagen employees with different departments. Academic courses relevant to the project: Supply Chain Management, Optimization	2018 19- sem
Skoda Auto India Pvt. Ltd. , Mumbai	created VBA macros for preparing and sending the Parts, Accy., and Oil Business, Pending Cars, Budget and IACS Scores report automatically to the department as well as the respective dealers. Helped in monitoring and improving scores for IACS by working with the dealers to identify unsatisfied customers. Prepared a detailed standard manual to maintain uniform Q-check for all dealers. Monitored weekly Q-check progress and worked with the West Zone ASMs to improve the degree of fulfillment. Prepared several reports like Accy. Kit Dispatch, MOS, Car Down, Tyre Sales, Escalation matrix and iService usage report. Prepared an Excel Dashboard to monitor target vs offtake (business), Q-check, IACS dealers ranking and Aftersales Throughput both dealer wise and zone wise. Tool used (Development tools - H/w, S/w): Microsoft Excel, Powerpoint, Internal Databases like DMS, SAP and MQCP. Objectives of the project: To help improve Quality as well as Degree of Fulfillment of Qchecks carried out in workshops. To work closely with Customer Support teams of Workshops by helping them revise QFB scores of IACS customers. To code Macro scripts for automating Weekly After S Major Learning Outcomes: Increase the efficiency of Dealer workforce on matters like Qcheck and Customer interactions. Introduce Macro scripts to help prevent the wastage of valuable time in carrying out repetitive tasks. Details of Papers/patents: None Brief Description of working environment, expectations from the company: Working environment was very relaxed and friendly. In my department, i.e. After Sales, there was routine work daily like preparing weekly reports or keeping track of different initiatives like IACS, QCheck, Excallation matrix, etc. During the internship, major part of our work was based on Microsoft Excel. I got to learn many new functions and features within Excel like Pivot Table, Graphs, Dashboards, etc. I also learned a new computer language called VBA which was used in Excel to prepare scripts called Macros to run automated tasks like pre	2019 20- sem1

Company	Experience	Year
Solar Energy Corporation of India , Delhi	I had to design Field Quality Assurance Plans (FQAP) for construction purposes. FQAP is very important document that helps in smooth communication of designers and site engineers. It is also used in maintaining the quality of work done on the site. I studied the existing versions of FQAPs, identify and analyze their limitations. I then studied the tenders, relevant IS codes and other reference documents and try to increase their scope. Tool used (Development tools - H/w, S/w): MS Word, MS Excel, MS Powerpont, AutoCAD Objectives of the project: To design Field Quality Assurance Plans (FQAP) for construction purposes Major Learning Outcomes: In-depth knowledge of designing and practical aspects of construction, the problems faced Details of Papers/patents: Brief Description of working environment, expectations from the company: The company environment is good. Everyone in the office is extremely professional and helpful. The employees are extremely motivated, disciplined, dedicated and knowledgeable. The work given is challenging but at the same time not very stressful. Students interested in company's field of work can learn a lot. Academic courses relevant to the project: Foundation Engineering, Design of Concrete Structures, Design of Steel Structures, Surveying, Fluid Mechanics, Hydraulic Engineering, Construction Planning and Technology. Student	2019- 20- sem1
Spark Minda Technical Center	I worked on the new junction box design project on spark minda, the aim of the project was to modernise the old hardware based junction box design to a Pcb Based design we started with the client spec sheet only, that was proceeded by a sample design to a client, which in turn was approved for further system requirement clarification and from which the the hardware requirements were created by us and then it was put into software testing and afterwards it will be put in field testing. I also worked on design of a multivibrator model to be used in future speedometers and a flasher circuit to be used in panic devices for 2 wheelers. Tool used (Development tools - H/w, S/w): Multisim Online,Excel Objectives of the project: Modernisation of current mechincal junction box to a PCB based Design Major Learning Outcomes: Learned how to design and model systems and test the veracity of design not only on performance criteria but also on cost and manufacturing criteria. Details of Papers/patents: designed has passed software testing stage and is to be simulated in field. Brief Description of working environment, expectations from the company: the working environment was cordial and friendly, the company has excellent in house amenities in office.the company boasts of a lot of testing facilities ranging from live vehicle testing to component simulation on microelectronic scale and testing facilities on individual auto components. Overall i had a satisfactory experience with the organisation. Academic courses relevant to the project: Electronic Devices and Analog Electronics were the most important courses from this Project.	2018- 19- sem1
Spicer India Privat Limited, Pune	Working at SIPL as an intern is quite an unique experience. This station is best suited for those who wish to pursue core sector. This will give you an idea of how an core company works. My project at R & D department was to manage my own daily chores as an application engineer and to automate the current operation of spot welding on the existing conveyor. The automation was easy but the handling and process was a tricky part. The plant team and all the people involved helped me complete the task in hand. Through the project I was introduced to the analytical and characterization techniques that I had just the theoretical knowledge. Now, I have the idea of the principle and working of these techniques which will surely help me in future. I would like to say that working at SIPL has left me stronger both technically and professionally. This has been an experience of a life time and has definitely made a better person. Tool used (Development tools - H/w, S/w): Robo Studio, PLM, SAP, etc Objectives of the project: Puddle hole welding automation of a line Major Learning Outcomes: Creativity to design a system with current line constraints Academic courses relevant to the project: Robotics, Machine Design and Drawing Name: Pujan Vakharia (2014B5A80967G)	2018- 19- sem1
Spicer India Privat Limited, Pune	Execution of propagation plan for Behavioural Competency model, Standardization of employee life-cycle procedures, Tarang Festival Management, Employee Spotlight Publication, HRMS Portal Management, AOP Data verification, Candidate interview arrangement, Analyze and propose changes in certain policies including Leave Policy and Gratuity Policy Tool used (Development tools - H/w, S/w): Excel, Photoshop Objectives of the project: To understand the business process from the people management perspective, standardize specific procedures such as Employee Onboarding, across all the plants. Major Learning Outcomes: Importance of Standard Operating Procedures when enforcing the board vision to the employeed Academic courses relevant to the project: Principles of Management Name: Karan Jain (2014B5A40873P)	2018- 19- sem1
Spicer India Privat Limited, Pune	Creation of SOPs for Business Development Exports Department for Kick Off and Quotation Process, aiding my mentor by providing analyzed data during his international business trips, understanding how customer customer demands are met in terms of production, cost break up of any product, commodity and forex impact on a exports involved firm. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: Creatring SOPs for Business Processes Major Learning Outcomes: Corporate structure and environment, VSM, need for SOPs, international trade, effect of external factors on company, etc. Name: Ashutosh Desai (2015A4PS0230G)	2018- 19- sem1

Company	Experience	Year
Spicer India Privat Limited, Pune	Implementation of IOT devices on machines in two different plants. Training of all departments for their roles. Problemsolving. Creation of dashboard for senior management for real time monitoring of machines. Tool used (Development tools - H/w, S/w): Power BI, Microsoft Office Objectives of the project: Digitisation of Production Major Learning Outcomes: Automation in Industry, managing multiple departments and people of varying designation, corporate requirements from freshers Brief Description of working environment, expectations from the company: Strictly 9 hrs of work, bus transport provided, cubicles with computer provided, interaction with board members for work, lot of HR activities Academic courses relevant to the project: Robotics, AI	2018- 19- sem1
Splash Math , Gurgaon	Created a service for Push Notifications using AWS SNS in Java in first project. Then created a mailing service to send offer mails to the users in second project. Then created licence and subscriptions for premium users using Stripe and Java in third project. Tool used (Development tools - H/w, S/w): Spring framework, IntelliJ framework, Thymeleaf, AWS SNS, PostGreSQL, Postico, Stripe, Airbrake. Objectives of the project: To send push notifications to users. To send offer mails to users. To create licence and subscriptions of premium users. Major Learning Outcomes: Learnt how to work in teams and how to work under pressure, face deadlines. Got exposed to many new softwares. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is very good. But they expect you to finish the assignment within the deadline. Academic courses relevant to the project: Brief write-up on PS-II station: SRF Gurgaon focus on innovations in chemical technology. The students were able to perform well. Student	2019- 20- sem1
SRF Limited, Bhiwadi (Gurgaon)	Optimized the space available for the storage of the Filled and Empty Cylinders manufactured and ordered respectively by the HFC Filling Station of SRF's Bhiwadi Plant. Calculated the Mini-Max Levels associated with the demand of each of the five products filled in cylinders by the filling station. Helped in Improvising the Filling Capacity of the station. Tool used (Development tools - H/w, S/w): MS-Excel, Minitab Objectives of the project: To devise such production and inventory storage levels so that the increasing demand can be catered Major Learning Outcomes: Applied the studied theoretical concepts in real life problems with modifications according to the problem. Academic courses relevant to the project: Supply Chain Management	2018- 19- sem1
SRF Ltd. , Gurgaon	Pump and line sizing, Scrubber design, Fume Venting, instrumentation and equipment design, reactor design, utility selection and optimization. Tool used (Development tools - H/w, S/w): Aspen Objectives of the project: To design a scrubber according to HCL fume venting. Major Learning Outcomes: Operation criteria and working of scrubber, reactor utility optimization technique, selection of instruments and their application on pipe lines and equipment, pump selection criteria and line sizing. Details of Papers/patents: Brief Description of working environment, expectations from the company: Friendly and caretaking management, helpful mentors, cooperating co-workers. Comfortable office work. Academic courses relevant to the project: Mass transfer operation, chemical process calculation, heat transfer, process Dynamics and control, fluid Dynamics.	2019- 20- sem1
SRF Ltd. , Gurgaon	The work at the PS station was related to the process design which involved calculations related to Mass and Energy balance. It also involved making of Block flow diagrams, Process Equipment List and Process flow diagrams. All this designing is done in order to estimate the total cost of a product required. Tool used (Development tools - H/w, S/w): MS-EXCEL, Aspen Plus Objectives of the project: Process Development and Scale up studies of new products Major Learning Outcomes: Scale up, Process design Experience and Some reactor design Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is good. The whole staff and team were quite supportive and helpful. Academic courses relevant to the project: Chemical Process Calculations and Process Design Principles Student	2019- 20- sem1

Experience Year Company The newer technology nodes has created enormous design challenges (like- parasitic becoming comparable to circuit resistance and capacitance, increased Electromigration and IR challenges, ballooning of DRC checks etc) thus EDA tools and methodologies used earlier have now become obsolete. Semiconductor industry needs tools which use machine learning and big data to predict yields, faults, reliability, aging curves, etc for electronic circuits even before they are even fabricated so as to decrease timeto-market speed. I had a privilege of working on beta versions of two such tools, running various test cases on them (for doing process/statistical variation) and providing feedback so as to further improve these tools. One of tool after the evaluation presented by me was purchased the company while the others purchase was delayed as it did not bring the value for money and performance enhancement as expected by the company. Tool used (Development tools - H/w, S/w): Virtuoso, Custom Compiler, Eldo, 2019-ST Microelectronics(I) Spectre, Hspice, Wicked, Calibre, etc. Objectives of the project: Objective of my training was to improvise 20-Pvt.Ltd., Greater Noida the methodologies used for yield analysis through pre and post layout simulations (which included sem1 verification and statistical/process variation), in order to meet the time-to-market with reasonable accuracy. Also Major Learning Outcomes: I learnt about the state of art technologies like FD/PD-SOI (their design, advantages, limitations & future scope) used in the semiconductor industry at present. Then I also had a familiarization with the various EDA (Electronic Design Automation) tools. Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is quite good. People are always ready to help, one gets a great exposure by knowing about the recent trends in the industry and new technologies that are under development. There is little difference in the work given and result expected from interns and employees, which I suppose makes this a great place to grow professionally. Academic courses relevant to the project: Electronic Devices, Microelectronic Circuits, Digital Design, Analog Electronics. Student The work at SSGA largely depends on what team you are allotted . I was allotted fixed income cash and currency research team (FICC). Then work mainly comprised of building data infrastructure for the team 2018-State Street Global Advisors Tool used (Development tools - H/w, S/w): R, SQL, Excel Objectives of the project: There was no fixed 19project we used to carry daily Business as usual activities Major Learning Outcomes: Familarity with sem1 databases Academic courses relevant to the project : Econometrics I was taken as an intern to reduce the production takt-time of the wheeler pack battery production. I have to study every assembly and subassembly stage on every micro detail and also the operational sequences of the production to optimize the time for production purposes. Give different methods or tools, tackles to reduce the human stress. That requires designing of tool, get the supplier's contact and get it manufactured. That also involves different discussions with suppliers about technical details of the product and processes. Get the quotations and also the bargains to do businesses. Tool used (Development tools - H/w, S/w): Creo Parametric, MS word and excel Objectives of the project: To reduce 2019the production time of one of the products. Major Learning Outcomes: Learnt about industrial sector on Sun Mobility, Bangalore how any kind of engineer works and also how business runs between two companies. The different kinds 20of production processes from mechanical, electrical and software perspective. Details of Papers/patents: sem1 Brief Description of working environment, expectations from the company: The working environment is perfectly balanced by the number of freshers and also the experienced people. All the managers are easily approachable. It is really good place to learn anything like supply chain management, Production of different products, in view of electrical, software, mechanical and also in business terms. Can go and meet any employee and ask to learn about something. Academic courses relevant to the project: Machine Design and drawing, Production Techniques, Thermodynamics, Electrical circuits, Finance management, Material sciences Student To device an online platform for employee purchase requests to be approved by the appropriate chain of command and executed by the Supply Chain Management team. The work was to be done using ASP.NET MVC. Other work involved computer networking, socket programming, pyhton, json programming and so on. Tool used (Development tools - H/w, S/w): Microsoft Visual Studio, Linux terminal, SQL database, Wireshark Objectives of the project: To device an online platform for employee purchase requests to be approved by the appropriate chain of command and executed by the Supply Chain Management team. A 2018python script that mimics the working of a Temperature-Humidity Sensor for the purpose of traffic **SUN MOBILITY** generation. Automation of uploading of configuration files of CANoE for different settings by writing a 19-**TECHNOLOGY CENTER** shell script. Making TIU summaries for the battery packs in use in the field tests going on in Gurugram, sem1 uploading it on a page and creating a button on Atom dashboard for the company personnel at Gurugram to enter the battery pack out times. Major Learning Outcomes: Linux terminal commands, C#, SQL, Python socket programming, Json programming in python Brief Description of working environment, expectations from the company: Growing startup with very hectic work schedule. But great opportunity to learn and ease into the industry. Academic courses relevant to the project: Object Oriented Programming, Data Structures and Algorithms Name: Deshmukh Ajinkya Bhushan (2013B2A10851G)

Company	Experience	Year
SUN MOBILITY TECHNOLOGY CENTER	First project involved creating a we application for employees to make purchase requests. Second one was working on code for swap stations for buses with electric batteries. Tool used (Development tools - H/w, S/w): C#,C++,SQL,.NET,Docker,Kafka,ElasticSearch Objectives of the project: The first one was to make the purchase requests as an online task. Second one was to make the bus station functional. Major Learning Outcomes: Concepts of Object Oriented Programming and DevOps. Brief Description of working environment, expectations from the company: The work environment is very friendly, however in certain situations it is difficult to get someone to help are people are usually busy with their own deadlines. There are projects in almost all areas and allotment is very flexible. There is immense scope for learning, although most of it has to be done by yourself. The projects are very interesting and working on live projects with products being deployed days after your work is done gives huge satisfaction. Academic courses relevant to the project: Object Oriented Programming, Control Systems Name: GUGGILAPU MOULI SAI RAM (2015A2PS0677P)	2018- 19- sem1
SUN MOBILITY TECHNOLOGY CENTER	Mapping Of Infrastructure (Electrical and Civil) required for Electric Vehicles and Utilising Renewable Energy to Power EV. This is to provide a structure for EV charging infrastructure rollout in Urban Cities of India. This can be used to determine and understand different kinds of limitations in execution of Electrical and Civil work for setting up charging Infrastructure for Electric Vehicle. Tool used (Development tools - H/w, S/w): Geographic Information System, Auto Cad, Google Earth Objectives of the project: Mapping Of Infrastructure (Electrical and Civil) required for Electric Vehicles and Utilising Renewable Energy to Power EV. Major Learning Outcomes: Learned Geographic Information System, Civil Related Learnings Brief Description of working environment, expectations from the company: Amicable Environment. Lots of things can be Learned Academic courses relevant to the project: Structural Engineering, Power Systems Tool used (Development tools - H/w, S/w): Python, Spark, SQL Objectives of the project: Improve customer experience Major Learning Outcomes: Working on this project has been a great learning experience for me. I have developed great understanding of data science and its potential impact on business decisions in our ongoing tenure at Swiggy. Academic courses relevant to the project: Machine Learning, Data Mining, Probability and Statistics. Name: Sudhanshu Grover (2015A2PS0661P)	2018- 19- sem1
Swiggy	Picked up various projects to improve the efficiency of sales team PAN India. Work involved research and data analysis in order to make various recommendations to improve Sales Efficiency, Customer Experience, Partner Experience. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Increasing the Efficiency of the Sales Team Major Learning Outcomes: Understood how various Businesses work; ProblemSolving; How big decisions are made. Brief Description of working environment, expectations from the company: Good people. Great office. Any intern here wouldn't be able to find a good work-life balance, here, but the learning experience is great. Name: Yash Sachdev (2015A1PS0657G) Tool used (Development tools - H/w, S/w): Excel, PowerBI, SQL Objectives of the project: Hygiene Audits - Ensuring Restaurants have good hygienic Conditions Major Learning Outcomes: Project Management, StakeHolder Management, Data Analysis Name: Prateek (2014B5A20827P)	2018- 19- sem1
Swiggy	Developing business ideas for Swiggy POP and taking new initiatives to see growth of product. Did analysis on the user behavior and suggested action plans which really impacted the business in a positive way. Tool used (Development tools - H/w, S/w): SQL, Advanced Excel Objectives of the project: To understand and grow Swiggy POP in terms of orders and area coverage. Major Learning Outcomes: Business strategies, stakeholder management, technical skills, time and people management Brief Description of working environment, expectations from the company: Work environment is super awesome. People are really helpful. You can approach anybody and learn tons of things. Academic courses relevant to the project: Principle of economics, any management project Name: Sudhanshu Grover (2015A2PS0661P)	2018- 19- sem1
Swiggy	My target was to undertake several projects to improve the sales efficiency of Swiggy On-ground City-Sales Teams. Involved a lot of research, and then, to take the pitch any initiative, I needed to collect data and analyze it to understand if a project is really, necessary. I undertook several projects and drove them from end-to-end. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: To improve the sales efficiency of Swiggy On-ground City-Sales Teams Major Learning Outcomes: Data Analysis & Stake-holder Management Brief Description of working environment, expectations from the company: Great working environment. Learning is encouraged. Name: Shubham Gupta (2015A4PS0316P)	2018- 19- sem1
Swiggy	Primary objective of my project was to increase the ad sales using various levers such as utilisation, reducing FOC amount, slot price increase etc. Also created a tracker to manage the performance of Assured ROI campaigns and a dashboard to see the HP campaigns delivery. Tool used (Development tools - H/w, S/w): Excel, SQL queries, PowerPoint Objectives of the project: Increase ad sales using various levers Major Learning Outcomes: Problem solving and decision making skills, advance functions of excel, matching supply with demand, performance management and actions on laggards Academic courses relevant to the project: SCM Name: Meenakshi Sundaram (2015ABPS860P)	2018- 19- sem1

Company	Experience	Year
Swiggy	My intern Job Role was similar to that of Business Associate. I worked on my department projects initially based on Analytics(SQI) and Excel. Learnt how to Visualize Data, Prioritize and segment problems and solving them. Once I picked up pace and got to know about the working of my department, I was allotted a independent project wherein I had to figure out avenues for Decreasing Restaurant food preparation time. I did lots of Restaurant visits in Bangalore and zeroed in all 2-3 key levers for decreasing it and thereby delivering faster and enhancing customer experience. Once I did that study, then I had to implement them and see if it is actually reducing time in ~15 restaurants as a Pilot Project. Pilot project came out successful and the organization planned to scale it up in all high priority restaurants Whole experience was awesome, I got to learn basic working of an organization, my strength, weakness and interests. Overall, Fairly good company with lots of responsibility and learning. Tool used (Development tools - H/w, S/w): Mostly using Excel, SQL(Dbeaver), PowerBI, Bit of R and Python Objectives of the project: Levers for enhancing customer experience Major Learning Outcomes: Business Intelligence, Data Visualization, Vendor Management, basics about Product Management, Analytics, Sales, Marketing and Operations Academic courses relevant to the project: Technical Communication Name: VVS Bharadwaja	2018- 19- sem1
Swiggy	Swiggy opened up their own private kitchen by the name bowl company and homely. Our work was to understand how to scale up the operations and increase market penetration. Parallely, we had to optimise constantly the process followed inside the kitchen. We changed it from totally manual to semi automatic and it's moving towards more automation. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: To optimise and improve the efficiency of the kitchens by reducing preparation time Major Learning Outcomes: Optimising a process Lean management Utilising technology to reduce effort and time Start up ecosystem Brief Description of working environment, expectations from the company: The working environment is reasonably good. They can understand your needs and give you time to grow, learn and perform. The management is ready to listen to new ideas which you propose and is willing to experiment on them too. Their expections are on the dot. You cannot stretch too much from the preset time frames. Academic courses relevant to the project: Principles of management Supply chain management Optimisation Probability and statistics Name: Sanskriti Sinha (2014B2A80865G) Tool used (Development tools - H/w, S/w): SQL, Python Objectives of the project: Prediction of orders of a restaurant in a day and DEzone clustering on the basis of batching. Major Learning Outcomes: Working in Swiggy has given me a great working experience. I learnt various modelling, analytical and coding skills throughout my internship. I learnt that data-driven scientific decisions are more efficient than the intuitive ones. I used SQL and python in my project which improved my coding skills. I got hands-on experience on implementation of machine learning models in real life scenario which gave me clarity of concepts. I got to observe and understand the working supply of the organisation. Academic courses relevant to the project: Machine learning, Data mining Name: Keerti P (2014B1AB0777P)	2018- 19- sem1
Swiggy	Forecasting, benchmarking and cross-functional reviews Tool used (Development tools - H/w, S/w): Sql, Excel, Power BI, Tableau Objectives of the project: Order projections and Competition Benchmarking Major Learning Outcomes: Proficiency in Sql, conflict management Brief Description of working environment, expectations from the company: Amazing learning experience.	2018- 19- sem1
Symantec Software india, Pune	1. Designed a hardware model of Intel processor pipeline to mitigate the meltdown vulnerability. 2. Developed a machine learning model using recurrent neural networks(LSTM) to identify malware based on tri-grams from disassembly of windows PE files. Tool used (Development tools - H/w, S/w): Python, Keras, scikit-learn, IDAPro Objectives of the project: Malware identification using disassembly of executables Major Learning Outcomes: Machine Learning, Computer architecture Brief Description of working environment, expectations from the company: The company and work environment are pretty relaxed. We were given individual projects to work upon. There are not many good projects here though. The company was going through cost cutting process and we saw many of our colleagues leaving the company and so no one was offered PPO. Academic courses relevant to the project: Machine Learning, NNFL, Computer Architecture, MuP Name: Mulay Manas Yogesh (2015A7PS0042G)	2018- 19- sem1
Symantec Software india, Pune	My work initially involved malware classification by modelling streams of API / system calls (by executables) as a language, and using Word2Vec to check for similarity between the API Calls. Then it was pivoted to a binary classification problem using the same streams of System Calls. The System Calls were maintained by a company DB and an RNN (LSTM) model was created to classify the input stream into clean and malware files. Results obtained in the latter part were much pronounced than the former Word2Vec implementation, with accuracy going as high as 96%. Tool used (Development tools - H/w, S/w): Python, Gensim, Cuckoo Sandbox, Keras, SKLearn Objectives of the project: Malware Classification by using API Calls Major Learning Outcomes: I got to learn about a completely new field (Machine Learning) which I had not explored before. Worked in Python and used the keras and sklearn libraries to build a LSTM model. Academic courses relevant to the project: Machine Learning, Neural Networks Name: Vidushi Gupta (2015A7PS0011P)	2018- 19- sem1

Company	Experience	Year
Symantec Software india, Pune	1. Worked on development of web application which finds vulnerabilities in firmware of IoT Devices. 2. Build a RNN-model which detect anomalies in network traffic. Tool used (Development tools - H/w, S/w): AWS Cloud, Flask, Python, Jquery, Javascript, Anaconda, Keras, Pandas, Scikit learn. Objectives of the project: 1. Providing vendors of IoT devices with a platform where they can keep check on firmware's vulnerabilities. 2. To detect anomalies in network traffic. Major Learning Outcomes: 1. Learnt Web application development and get good command in API calls, python language, AWS cloud. 2. Machine learning model designing and Product designing from the very scratch. Brief Description of working environment, expectations from the company: The working environment in Symantec is very friendly. People here are knowledgeable and always ready to help you. But projects offered to interns in Symantec are not well planned and might end up on dead end. Academic courses relevant to the project: operating system, computer networks, machine learning. Faculty Name: Mahesh Kumar Hamirwasia	2018- 19- sem1
Symantec Software Solutions Pvt. Ltd - Data Analytics,	To create a Google Chrome extension that detects when a user has visited a phishing website and alert the user regarding the same in real time. This is done using Perceptual Image Hashing and a domain-hash dictionary. Tools used (Development tools - H/w, S/w): Perceptual Image Hashing, Javascript, Google Chrome extension development library, Python scripting, Selenium, PHP Objectives of the project: To create a marketable Chrome Extension which can be sold along with Norton security Outcomes of the project: A prototype Chrome extension which performs all requisite functions and can be marketable after slight modifications. Major Learning Outcomes: Product design from inception to market-worthy completion, web design, scripting, statistical analysis Brief Description of working environment, expectations from the company: The company has a lenient approach towards work and is not stringent about in-times. However, the projects are not well planned and might end up on a dead-end. Employees are extremely supportive and mentors are knowledgeable. Academic courses relevant to the project: Data Structures and Algorithms	2017- 18- sem1
Symantec Software Solutions Pvt. Ltd - Data Analytics,	I worked on the Django and flask API for building a monitoring portal for all the automations. The Portal checks running status and intended task of completion status and displays it on the web interface. Also Remote Procedure Call was used to start scripts remotely. Tools used (Development tools - H/w, S/w): Django, Flask, HTML, Bootstrap, Morris Charts Objectives of the project: To monitor all the automations and remotely control them Outcomes of the project: Completed intended objective successfully. Major Learning Outcomes: Command in Python language, Bootstrap and JavaScript Brief Description of working environment, expectations from the company: The work atmosphere in Symantec is very friendly. All that matter for them is outcome, within the given deadline, irrespective of the hour involve. Academic courses relevant to the project: DSA, Database Management Bangalore Faculty Comments: Expectations from industry: Students in Bangalore were primarily involved in Big Data migration and automation testing. Knowledge of Big Data, Network Security, C/C++/Java, Apache Hadoop framework was used. Student	2017- 18- sem1
Symantec Software Solutions Pvt. Ltd App Development,	Succesfully build a mobile and web application which showcases the strong authentication using VIP Services and CDK (Credential Development Kit). Succesfully implemented push notifications from APNS. Tools used (Development tools - H/w, S/w): Node, js, Express Framework, Xcode, Swift. Objectives of the project: Depict strong authentication via two factor authentication using VIP Services. Outcomes of the project: Succesfully completed the web and mobile applications and are now deployed in the AWS and AppStore. Major Learning Outcomes: Learnt about strong authentication, APNS, web application and mobile application development. Brief Description of working environment, expectations from the company: Working environment in the company is really good. We can expect some productive work where we can learn many concepts and gain experience from the team members you are working with. Bangalore Student	2017- 18- sem1
Symantec Software Solutions Pvt. Ltd App Development,	1. Migrating Norton Mobile Security app to Android O. 2. Anomaly detection in telemetry data using ML techniques. Tools used (Development tools - H/w, S/w): Android Studio, R studio Objectives of the project:  1. To make NMS app compatible with Android O. 2. Make predictive model. Outcomes of the project: NMS app was made compatible with Android O and a predictive model was made for anomaly detection. Major Learning Outcomes: Learnt Android app development and ML on real world big data Brief Description of working environment, expectations from the company: Employees are busy so mentorship is less. Students have to learn on their own. Nature of work depends upon the team alloted. Academic courses relevant to the project: Object Oriented Programming, DBMS, Machine Learning Student	2017- 18- sem1

Company	Experience	Year
Symantec Software Solutions Pvt. Ltd. , Bangalore	Worked on AWS, network emulators and tried to create an environment similar to Virtual Private Cloud on AWS in the available systems for CIC(company product) use. Certificate Authority working and certificate scans and verification. Tools used (Development tools - H/w, S/w): AWS, JAVA Objectives of the project: -To create an environment for demonstration of CIC (A Symantec product) and make the environment replicable with necessary components of it. Outcomes of the project: Provided ground work for creating above mentioned environment, learned mainly about cloud computing and networking. Major Learning Outcomes: Cloud computing, Networking, certificate authority side works Brief Description of working environment, expectations from the company:Company is very good, not much work pressure so good if you want to prepare for something else. Has bus services which goes to all parts of Bengaluru. You may have to force your mentors/ managers to give some work at times.	2016- 17- sem1
Symantec Software Solutions Pvt. Ltd. , Bangalore	my work was mostly based on API and gateways. Even worked on upsell engine Tools used (Development tools - H/w, S/w): eclipse api html Objectives of the project: transferring apis to gateway and recommendation engine Outcomes of the project: transferring apis to gateway Launching the testing process in a single step using the wrapper class. Major Learning Outcomes: api and api gatewaysbuilding REST and SOAP api Brief Description of working environment, expectations from the company:friendly environment and good work	2016- 17- sem1
Symantec Software Solutions Pvt. Ltd. , Bangalore	Various Projects, mostly web development Tools used (Development tools - H/w, S/w): JAVA web frameworks (Spring, Struts, Jersey), Maven, JSP, JavaScript. Also, Shell Scripting, JAVA web development Objectives of the project: -Projects included a web extension, a client wrapper around an existing program, modifications to a web console Outcomes of the project: Most of the requirements of the projects were not completed. projects weren't difficult. Major Learning Outcomes:Workflow of software development in industry. Various technologies like Maven, JSP, JAVA web frameworks. Worked in Linux a lot, so learnt about shell. Brief Description of working environment, expectations from the company:The working environment here is very relaxed and easy going. The people are nice people who are hardworking but fun working. The company expects that you do your assigned project on time. nobody expects that you work after working hours (There may be an odd half an hour meeting after hours, but very rare though). You can go and come whenever, as long as you are up to date on your work. The leave and 'work from home' policy is quite lenient. All in all, a very good place to work. The quality of projects will depend on the team you get.	2016- 17- sem1
Symantec Software Solutions Pvt. Ltd. , Bangalore	I have been allotted a project to manage certificate life cycle using Web Crypto API which was earlier done using keygen mechanism. A key pair was generated using web Crypto API and stored in Indexed DB browser storage. PKCS #10 request was generated and submitted to the CA (Certificate Authority) during user enrollment for certificate. After receiving the signed certificate from the CA, a PKCS #12 is generated binding the signed certificate and it's corresponding private key and. p12 (PKCS #12) file is downloaded ti the windows store. And using this. p12 file, the certificate is imported to the required browser for client authentication. JavaScript code for generating PKCS #10 and PKCS #12 is written with the help of PKIjs and ASN1js open source libraries. Tools used (Development tools - H/w, S/w): JavaScript Promise, HTML, JAVA, Apple Script Objectives of the project: -Developing a JavaScript based client for managing the life cycle of a certificate using WebCrypography API, as a replacement to keygen. Ensuring the functionality of the script in all the browsers and extending it with different algorithms. Extending the interface to interact with hardware tokens such as smartcards and USB dongles in order to achieve highly secure transactions by two-factor authentication Outcomes of the project: Symantec issues certificates to clients, which enhance level of authentication and privacy to digital communications. Hence, we require a better interface to manage certificate life cycle which was earlier managed with the help of keygen. But because of certain limitations with keygen, it has been deprecated by almost all the browsers. Thus, the project (Keygen replacement POC) enables Web applications that require features such as cryptographically strong random number generation, constant-time cryptographic primitives, and to the best extent possible, a secure key store with the help of WebCryptogarphy API and Indexed DB. Major Learning Outcomes: My work in Symantec is a very good learning experience. Got to work on	2016- 17- sem1

Experience Year Company There are multiple projects we have done. One of them is a automation of certificate lifecycle management. We used open source protocol and client, connected to the CA server and were able to send CSR, get the certificate, install and renew it. The second project is an extension for sales team which sends a Http get request to the CryptoReport API and displays a brief summary of the domain details in the popup. This will help the sales team to coordinate with the customers better. Tools used (Development tools - H/w, S/w): Shell Scripting, JavaScript, Maven, Struts and spring frameworks, JSP. Objectives of the Symantec Software project: The objective is to prepare an extension so that the sales team can get the information on the go 2016-Solutions Pvt. Ltd., and communicate it easily to the customers. Outcomes of the project: The plugin is in use and the team has 17-Bangalore been satisfied with the information provided by it. Major Learning Outcomes: Shell Scripting, JavaScript, sem1 Struts and spring frameworks, JSP and a little web development Brief Description of working environment, expectations from the company:The working environment was pleasant and friendly. The work will be given mostly according to the interests and the mentors help a lot in solving the roadblocks if any. The work will be given by the product manager and he/she will be following up on the work periodically and expect us to finish it before deadline and be ready to do more. There are enough incentives to reach their expectations and it has always been worthwhile to do the work in time. I was a part of the Validation and Identity Protection(VIP) during my PS at Symantec, Bangalore. The project assigned to me was a POC which dealt with the evaluation of facial recognition and typing detection as authentication factors in sign-in process. For this purpose, I was given third party biometric authentication SDK's which I had to integrate with sample login applications in order to test them for security and user experience analysis. Tools used (Development tools - H/w, S/w): Android studio, XCode, SoapUI, Chrome Advanced REST client Objectives of the project: -Evaluation of facial recognition and typing behavior detection as authentication factors in sign-in process Outcomes of the project: At the end of my PS, I prepared a report which included the user experience gradation, dependency information, false positive and false negative analysis of the tested biometric authentication SDK's. Major Learning Outcomes: I learnt a lot about mobile application development in android and IOS during the course of my project. The concepts that I had learnt during OOP, operating systems courses at BITS were very useful in application development. I also learnt about REST and SOAP web services as these concepts were very important for SDK integration. I was also introduced to certain concepts in the field of network security Symantec Software 2016such as strong authentication and OAuth protocol. Brief Description of working environment, expectations 17-Solutions Pvt. Ltd., from the company:Symantec is a company which works in the area of network security. The working Bangalore sem1 environment is really good with flexible working hours. Most of the projects deal with security technologies such as SSL certificates, authentication techniques etc. Senior members of the project teams are very encouraging and enthusiastic. Interns at Symantec can learn a lot especially in the fields of OOP, cloud computing and network security. During my project, i was briefly introduced to machine learning and I really liked this field of Computer Science. I expect that in future there will be more projects in machine learning which provide more experience and knowledge to the student about the field. Mentor Designation: HR The PS-II students are good in adaptivity which encouraged their learning on tasks, assignments and corporate culture. Student justified to their job role. Got a good and positive feedback from their respective mentors. Per discussion with Mentor below capabilities they are looking for Interns: 1) Good Communication [Verbal & Written] 2) Willingness to accept Challenges 3) Quick Learning Faculty Per discussion with SPOC of Symantec Pune below is the list of Capabilities they are willing in an Intern: 1) Knowledge of Company Profile 2) Basics of Domain 3) Quick Learning 4) Good Communication [Verbal and Written 5) Willingness to adapt & ready for new challenges Student

Company Experience Year

has worked on similar lines for me. Working at Symantec, I largely dealt with Network Security and User Verification and Identity Protection. The prime motivation is to keep track of your sensitive data in motion, at rest, or in use give access only to users who need it and encrypt your data in case it falls into the wrong hands. I essentially worked on Verification and Identity Protection's Enterprise Gateway, handling security policies and identity management. It involves working with LDAP Directory Synchronization Service to support load balancing and failover, multi-server User Stores and third-party User Stores, performing Cloud + VIP based validation services (first and second factor authentication). The internship was a good learning experience as I had the mammoth task of not only familiarizing myself with cloud based security and information security issues, but also work on it, in real time. But more importantly, the understanding of working as a team, the necessity of working with expectations and deadlines and being committed to your work was the most important take away from the experience. I can safely say I got a lot to learn in the past 5.5 months. It is in terms of understanding how the industry works, what should be your code of conduct in an organization, the kind of expectations you are to work on and to perform as a team player. It has certainly put me at a better place, where I can easily bridge the "experience gap" between understanding and performance, which otherwise was missing. From the day I started to date, as I calculate, I see that my learning curve has been a steep, increasing one. It is perhaps the best learning experience I've had, where I prepared myself for the industry, bettering each day. My zest for network security and authentication services has soared. I started from scratch and after all these months of learning and working, I can confidently put it up as one of my interests and skills. I am more disciplined as a person and I am looking

forward to similar experiences. The industrial experience provided good expertise and the confidence to

go ahead and be a part of such an ecosystem.

Good learning experiences always mould and change us in ways more than one. The internship I pursued at Symantec Software Solutions Pvt. Ltd, Bangalore for a period of approximately 5.5 months, indisputably

2015-16sem1

Solutions Pvt. Ltd., Pune

Symantec Software

Symantec Software

Solutions Pvt. Ltd.,

Bangalore

I took part in development of Malware Replication and Attack Reproduction Server for IPS Team. With ever increasing Malware and Exploit Kits it has become a tedious task to analyze and track coverage of the malware. Automating it would save a lot of time for the IPS team. My task was to cooperate with my mentor Mr. Deepak Singh, for the design of the project. We started design the project based on his templates. We used Cuckoo Sandbox as Malware analysis tool. First few weeks I spent understanding Exploit Kits, Malware Analysis and designing the project along with my mentor. Then I spent most of the time setting up Cuckoo Sandbox and integrating Symantec tools with it. Then developed the web portal for submission of tasks for analysis. I learnt a lot from the project mainly designing the project and setting up sandbox on ESX was challenging. My coding skills improved when I had understood Cuckoo Sandbox code to integrate Symantec tools. Designing the web portal has helped me sharpen Django and JavaScript. Tools used (Development tools - H/w, S/w): Python, Django, Linux, Flask, Cuckoo Sandbox, JavaScript, Virtual Machines, ESX, Computer Networks Objectives of the project: -I have to develop an automated attack reproduction server. Outcomes of the project: We successfully completed the project supporting the strength of IPS team. Major Learning Outcomes: Working with ESX and Virtual Machines has been great. Designing and coding skills improved. Got a closer look about Malwares and Security Domain. Brief Description of working environment, expectations from the company: Initial few weeks spent time producing Exploit Kit attacks manually in the lab. Following days spent time with my mentor in designing the project course and structure. Explored various sandbox and choose Cuckoo sandbox for project. Initially we set the Cuckoo Sandbox on Virtual Box. During this time, I explored the sandbox and integrated Symantec tools with it. Next, we moved this setup onto ESX with more hardware and processing power. Next month spent time designing web portal for users which allows submissions of file hashes & URL, downloading PCAPS and reports. I feel the project is complete because of its complexity. It involved web development, Sandboxes and Virtual Machines. My manager is satisfied with my work. I also got a closer look on malware reversing. Overall I am very happy with the project and the work I did.

2016-17-

sem1

Company	Experience	Year
Symantec Software Solutions Pvt. Ltd. , Pune	In the internet age, the basic knowledge of computer security has become a must. There are many games on the internet that are designed to teach the basics of cyber security. However, their websites are willingly made vulnerable to several attacks in order to train the players about them and hence they expect the player to know the basics of HTML and JavaScript at the least. Our target was to focus on regular computer users who lack a background/interest in computer related concepts and teach them about these security basics in a fun way through a 2.5D online game instead of being preachy. I created a complete virtual computing environment with functionalities ranging from an in-game browser, various websites, apps, social networking chat-bots, file explorer, terminal, etc. and implemented a bunch of security related tasks into it while maintaining a story based top down gameplay alongside to make the game interesting. Tools used (Development tools - H/w, S/w): HTML5, CSS, JavaScript, JQUERY, Ajax, Node.js, MongoDB, Phaser Game Framework Objectives of the project: The objective was to develop a game that aims to teach the nuances of security related vulnerabilities to regular computer users in a non-preachy manner. Outcomes of the project: Developed a robust layout for the game and an in-game computer system, studied extensively about cyber security and implemented security based tasks in the game. Major Learning Outcomes: Node.js, MongoDB and a vast spectrum of security vulnerabilities. Brief Description of working environment, expectations from the company:Work environment and the people here are very friendly and the team tends to discuss your interests and then allocate projects accordingly instead of forcing an uninteresting project on you.	2016- 17- sem1
Symantec Software Solutions Pvt. Ltd. , Pune	Basic aim was to build an online service for creating, editing and validating Base Certificate templates used in PKIs Tools used (Development tools - H/w, S/w): Spring, JAVA Server Faces, Prime Faces, Hibernate, Persistence, Bouncy Castle Objectives of the project: Online interface for creating and editing certificate templates, Automating the validation of certificate templates Outcomes of the project: Online service(portal) for managing Base Certificate Templates Major Learning Outcomes:Spring, JAVA Server Faces, Prime Faces, Hibernate, Persistence, Bouncy Castle Brief Description of working environment, expectations from the company:Extremely good work environment. Flexible timings. Only expectation is that work is completed before deadlines. Very supportive professionals. Good work-life balance with cultural and recreational events being regularly held. No particular dress code. Faculty Practice School is a great opportunity for students to learn about corporate work and culture and to develop themselves for the same. Practice School aims to bridge the gap in the academic curriculum and industry. I had an opportunity to mentor students at PS-II station Tangoe India Softek services Pvt Ltd located at Bengaluru. Tangoe is a leading global provider of Enterprise IT Expense Management software and services to a wide range of global enterprises and service providers. Tangoe's technology and services platform are designed to help companies transform the management of IT assets, services, expenses, and usage to create business value, increase efficiency, and deliver a positive impact to the bottom line. Three students allotted to this station were having CS background and could able to work on projects such as web site development, JAVA parser and testing framework, Automation of i18n Label Manager etc. that requires skills in JavaScript, Eclipse, HTML, CSS etc. Student	2016- 17- sem1
Symphony Fintech Solutions Pvt. Ltd. , Pune	Worked on Financial Charting Application for Windows Operating System, Using C#.NET and Graphics9GDI+), Its used by Clients and Traders alike for analyzing trades of Indian Stock Market in Real Time. Tool used (Development tools - H/w, S/w): Visual Studio(C#.NET) Objectives of the project: Financial Charting Win32 Application Major Learning Outcomes: OOP concepts, Graphics(GDI+) on Windows Platform Details of Papers/patents: Brief Description of working environment, expectations from the company: People, mainly CTO and project leads here are passionate, ever learning mentors, They help with work if stuck, discuss ideas with you, and your ideas can go into development. Academic courses relevant to the project: OOP, Math Courses. DBMS, DSA is an advantage but not required	2019- 20- sem1
Symphony Fintech Solutions Pvt. Ltd. , Pune	Worked on designing of financial trading analytics and complex graphical rendering framework. Also worked on migration of order execution management system code base to .NET Core to make it cross platform. Tool used (Development tools - H/w, S/w): C#, .NET, GDI+ Objectives of the project: To create a platform that graphically shows the market trends using various chart types. Also, I worked on designing of many features (tools & indicators) that would help the user to analyze the market trends. Major Learning Outcomes: OOP, .NET, Network programming Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is really good. You are given tasks for weekly sprints and a project manager is assigned to you who tracks the progress on daily basis. The company treats you just like their employees and also expects as much output from you. Academic courses relevant to the project: OOP, OS Student	2019- 20- sem1

Company	Experience	Year
synergiz global	Work can be summarized as a blend of civil and analystics. The project work includes interpreting the ongoing site data to yield insights of progress in the form of dashboards which only demands a basic civil knowledge to grasp things easily. Apart from this it also dealt with business development strategies and development of monitoring tool. On the whole it serves as platform to get feet wet in analytics. Tool used (Development tools - H/w, S/w): Tableau Objectives of the project: product development and project monitoring. Major Learning Outcomes: Analytics Academic courses relevant to the project: Project management Name: Mayank (2015A2PS0840P)	2018- 19- sem1
synergiz global	project management consultancy services, like manipulating client's data into charts, graphs, dashboards etc. business development works. Tool used (Development tools - H/w, S/w): MS Excel, Tableau, primavera Objectives of the project: To create interactive visuals from the client's data with the help of tools Major Learning Outcomes: understand and learn different project management softwares and tools and implement them to modify client's data. Academic courses relevant to the project: construction planning and technology (CPT).	2018- 19- sem1
Synopsys India Pvt. Ltd. , Hyderabad	Work basically involve devolving the library for tool custom compiler. It's an EDA tool which need different libraries. We basically create those libraries, test them and provide it to the user. Tool used (Development tools - H/w, S/w): Synopsys Custom Compiler(CC) Objectives of the project: Development of the iPDK Major Learning Outcomes: Learning of Python and Tcl. Also u will learn how to use CC Details of Papers/patents: - Brief Description of working environment, expectations from the company: Team members were very friendly. Since most of them are of our age bonding with them is easy. During my time i had average amount of work load but that can change. Work timing is from 105. Academic courses relevant to the project: Comp. Prog. Student	2019- 20- sem1
Tangoe India Softek Pvt Ltd, Bangalore	Stage 1: worked on majorly UI (July - September), Stage 2: worked on back-end, MVC (September - October), Stage 3: worked on again UI, front-end, some tickets and unit testing Tools used (Development tools - H/w, S/w): SpringIO, RabbitMQ, HanaDB, SQL, JSP, HTML, CSS, JavaScript Objectives of the project: - Front and back-end development including unit testing for development of Matrix Outcomes of the project: Learnt about various frameworks and also about deep core JAVA concepts Major Learning Outcomes: Learnt about what it takes to build an enterprise platform alongside a talented and helpful team who are more experienced than us. Brief Description of working environment, expectations from the company:The working environment is pretty decent and helpful as it is an established company working from past 10 years building telecom expense management software for big telecom companies like Vodafone.	2016- 17- sem1
Tangoe India Softek Pvt Ltd, Bangalore	Work done was in the field of web application development. Designed, built and deployed a web application that would translate labels and update them as needed. Tools used (Development tools - H/w, S/w): HTML, CSS, JavaScript, JQUERY, JAVA, J2EE, Maven Objectives of the project: Automation of an earlier completely manual project to ease internal use. Outcomes of the project: A web application Major Learning Outcomes: Front-end and Server-side application development Brief Description of working environment, expectations from the company:The working environment is very friendly, helpful and conducive to an intern's development. My mentor was very helpful always and suggested amazing videos or sources for topics that I needed to study. My teammates were very encouraging.	2016- 17- sem1

Company	Experience	Year
Tangoe India Softek Pvt Ltd, Bangalore	Designed and Implemented a JAVA parser and code generation testing framework. Framework is fully implemented in JAVA Language. It uses the power of Compiler API to parse the JAVA source code and TestNG to compare it with another content. Also, built dynamic, responsive website for project management which tracks all reports and status related to project and store them into MySQL database. Website's backend is supported by JAVA and MySQL and frontend has HTML, CSS and JavaScript. Tools used (Development tools - H/w, S/w): Eclipse, ArgoUML, CompilerAPI Objectives of the project: -The purpose of this project was to develop a validation framework for Key Maker which will decrease the manual effort of the developers by automating the work of testing of generated artifacts. I have created a generic framework which automatically pick the generated and expected file from the respected directory and perform the testing hence performing the test automation. My project also included the implementation of some of DmuTest operation which perform database automation hence reducing manual effort of accessing database for every single record. A dynamic, responsive Project management website has also been implemented. This website records daily activity on the project. It collects all the project related information at one place. Outcomes of the project: 1. JAVA Parser and testing framework 2. Responsive content management website Major Learning Outcomes:Gained experience of Coding in JAVA for big product, Learnt design patterns, Web Designing Brief Description of working environment, expectations from the company:Tangoe gives perfect environment to the person who has a little knowledge of Object Oriented paradigm and little experience of Coding in JAVA language. A student with a learning mind set can explore various principles behind the management of IT assets and expense management and also can improve his object oriented design skills. It gives a perfect environment to learn JAVA from beginner to advance level by letting wo	2016- 17- sem1
TAPCHIEF	My work revolved around engagement, and growth of TapChief Professionals. I also shared, grew and drove traffic to TapChief Blog by pushing content via different channels. Apart from this I closely tracked the metrics, and analyzed the impacts. Tool used (Development tools - H/w, S/w): Drip, Google Analytics, Excel, Google Adwords, Rebrandly. Objectives of the project: Growth of TapChief Community Major Learning Outcomes: - Understood the process to manage a community, and way to expand a community My vocabulary and grammer has improved drastically Learnt whole work process of content marketing. Brief Description of working environment, expectations from the company: Friendly environment, flexibility, supportive seniors. Academic courses relevant to the project: Digital Marketing Name: Abhyudai Mishra (2015A1PS0579H)	2018- 19- sem1
TAPCHIEF	Implemented Onboarding Process for Agencies that signup on the platform and maintained monthly supply analysis for the same. Tool used (Development tools - H/w, S/w): MS- Exel, Drip Objectives of the project: Streamlining Agency Onboarding Process Major Learning Outcomes: Communication Skills, Operations planning, Using Drip and running Mail Campaigns Brief Description of working environment, expectations from the company: Overall environment supports work but not Much Value Addition. Name: Nisanth Varma (2014A8PS379P)	2018- 19- sem1
TAPCHIEF	I handled community outreach at TapChief for the first 3 months and shifted to handling Network Development and Storytelling. I was instrumental in User acquisition having acquired more than 20,000 new users in my time here. I shaped their LinkedIn marketing strategy and contributed to their overall marketing roadmap. Tool used (Development tools - H/w, S/w): Google Analytics, Heap, Amplitude, Proprietary TapChief tools etc Objectives of the project: 1)User Acquisition 2)LinkedIn reach 3)Traffic 4)Conversions Major Learning Outcomes: 1)LinkedIn Marketing 2)Community Management 3)Storytelling 4)UI/UX Principles 5)Customer Journey Mapping Brief Description of working environment, expectations from the company: Great place to work at, especially if you're passionate about the mission. An amazing set of colleagues (quite a few of them being BITS Pilani alumni). Flexible timings, incredible mentorship. Name: Kuldeep Singh Naruka	2018- 19- sem1

Company	Experience	Year
TAPCHIEF	Worked in the Fulfillment Team of the Operations Department at TapChief. Fulfillment is the core team of company which handles all the projects which comes to TapChief. It includes sourcing profiles on TC Platform, Client and Expert(TC User) communication, Negotiation about the financials, conforming the projects and fulfilling them. The work at TapChief gives you a lot of challenges on a regular basis as Its a early stage startup which is working too hard to grow faster. The work at TapChief is not related to any particular technologies, so on that part you might not learn anything new here related to the technological part. Also, The workload at TapChief is too much that you can't even focus on other things if you want to. The PS platform shows that it has Saturday Sunday holidays but in my Team Fulfillment, there was no holiday on Saturdays. Tool used (Development tools - H/w, S/w): No tool was used as such. Objectives of the project: Working in the fulfillment Team of TapChief Major Learning Outcomes: You learn about the startup culture and how to work with your seniors and colleagues. Other than that there is no major outcome related to your skills and all. Brief Description of working environment, expectations from the company: The company is the company about which you should be worried because they doesn't have any projects particularly. They don't mention the correct details over the PS Portal. Their is no HR who can take care of PS Interns and you can't talk to anyone to whom you can talk about your worries. There is no particular procedure for the PS Interns. To give you an example, our stipend wasn't transferred to our account for the first month until we asked our respective team leads about that. On the 3rd of August, our bank details were taken when we raised the question about the stipend. You should expect only bad things at TapChief if you have got allotted this station. Academic courses relevant to the project: Nothing is required to work in this company. You can work if you are educated.	2018- 19- sem1
TapChief , Bangalore	I developed 2 dashboard solutions, 2 Android Apps and at least 3 more small scale Google Sheet solutions to productise and increase efficiency of TapChief CSR. I also got to work on automating various report generation and standardising reports solution. Tool used (Development tools - H/w, S/w): Google App Script, Node.js, Javascript, HTML, CSS, SQL, PostgreSQL Objectives of the project: Productising Macro and Micro Pods Major Learning Outcomes: - How to work in an professional work environment - Reporting work done per day to the manager - Better time estimation of work to be done Details of Papers/patents: None Brief Description of working environment, expectations from the company: The work environment is extremely proficient. The team constantly empathizes with you and make sure you are not facing any difficulties. They also try to keep you rejuvenated by organizing multiple POD and team outings (at least once a month). Overall I did not find any difficulty in getting along with peers. Academic courses relevant to the project: OOP, DSA (Not important that you have done both the courses, a basic understanding will also do) Student	2019- 20- sem1
TapChief, Bangalore	1) Made a user interface for image stitching and fusion. 2) Motion detection for an IP cam. 3)  Pedestrian/Vehicle detection and Tracking for driver vision assistance. Tools used (Development tools - H/w, S/w): OpenCV, C++, Python Objectives of the project: All projects needed efficient real time performance. Outcomes of the project: Experimented various methods for each project to finally fix an optimal algorithm. Major Learning Outcomes: Learnt new computer vision approaches. Brief Description of working environment, expectations from the company: Great work culture. Company expects good coding skills with experience in Image processing or computer vision Academic courses relevant to the project: Digital Image Processing Student	2017- 18- sem1
TATA Autocomp SystemS, Pune	I ran the operations of the iEDGE vertical, one of the departments in the company. The work was in no way related to my branch; anybody with a working knowledge can learn the necessary functions in a short span and do it. However, to do it well, and also in order to handle the entire operations independently, you would also require quick decision making and great problem solving as well as sound communication skills. You would be dealing with suppliers, vendors, users and company HR on a daily basis. Tool used (Development tools - H/w, S/w): Microsoft Excel Objectives of the project: To streamline the operations of the department and provide sustainable solutions to current roadblocks. Major Learning Outcomes: Sales, Vendor management, User account management, Operations	2018- 19- sem1

Company	Experience	Year
Tata Chemical Innovation Center , Pune	My Project was Synthesis of Silica Anisotropic Nanoparticles. Started with study of research papers related to silica synthesis continued with carrying out the synthesis reaction. Various parameters like Temperature, pH, Reaction time which can affect the reaction were adjusted. Also template and precursor to be used and also their amount was decided and various reactions were carried out. Analysis was done for all the Silica Samples. Various Characterizing techniques including FTIR( Fourier Transform infrared microscopy), FESEM( Field Emmision Scanning Electron Microscopy), TEM (Transmission Electron Microscopy), XRD( X-ray Diffraction), DOA(Dioctyl Adepate), BET Surface area, Particle size analyzer, Nanozetasizer were used and all samples were analyzed. Tool used (Development tools - H/w, S/w): Techniques: FTIR, FE-SEM, TEM, TGA, Nanozetasizer, Malvern Mastersizer, XRD, DOA. Tools: Peristaltic pump, pH meter, Hot plate, Agitator, Beakers, Measuring cylinders, crucibles. Objectives of the project: Objective of the project is to synthesize silica anisotropic nanoparticles by using different templates, precursors, etc. and to characterize these silica samples by using different techniques. Major Learning Outcomes: Following things are learnt: 1. To carry out synthesis reaction on a bigger scale using stirrer and peristaltic pumps. 2. Use various characterization techniques: FTIR, FESEM, TEM, TGA, XRD, DOA, BET Surface area, Particle size analyzer, Nanozetasizer. 3. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment at Tata Chemicals is very good. Everyone is very helping and very friendly to talk to. There are so many techniques to learn here and we are very free to work on our own ideas. Office location is very beautiful and working environment is stress-free. Apart from work, there is also celebration of festivals, ethics week, etc. Academic courses relevant to the project: Material Science, Engineering Chemistry, KRD.	2019- 20- sem1
Tata Chemical Innovation Center , Pune	Sugar is the most common sweetener in our households. It is a major component of our diet. But its high caloric value and glycaemic index makes it inadvisable for consumption for Diabetics, Sportsperson or health conscious people. FOS on the other hand has no such shortcomings and can be safely consumed by all of the groups mentioned above. FOS is a larger molecule when compared to sugar and has a higher number of sites available for H-Bonding. This higher instance of H-bonding may inhibit the retrogradation of starch in the bakery matrix by slowing down the transfer of moisture inside the matrix. FTIR and XRD were used to study the structural changes of Starch in bakery. The experiments were conducted on regular intervals of 3 days for 30 days. The change in FTIR and XRD indicate that the sugar cookies show a change in structure over 30 days. More experiments are needed to confirm the hypothesis. Tool used (Development tools - H/w, S/w): XRD,FTIR,DSC, multiple analytical machines, Highscore Plus, Origin Pro, OPUS, STARe Software, Excel etc Objectives of the project: To Study the Interaction of FOS (fructooligosaccharides) with Bakery Product matrix. Major Learning Outcomes: 1.Structure and changes in the bakery matrix over time. (knowledge) 2.Operating various analytical equipment. 3.Research methodology. Details of Papers/patents: Brief Description of working environment, expectations from the company: Good place to work. People are ready to help and teach you stuff. No shortage of raw material or lack of equipment to conduct experiments. Projects undertaken are innovative and completely new. No recycling of old stuff. Academic courses relevant to the project: Engineering Chemistry, Basic Chemistry, Biology, Materials science. Student	2019- 20- sem1
Tata Chemicals Innovation Center	Comparative study of processing of Mung and Chana: Water Absorption and Drying with Different thermal treatment. Objectives of the project: Modelling to predict Behaviour Academic courses relevant to the project: Thermodynamics, Numerical methods	2018- 19- sem1
Tata Consultancy Services , Bangalore	My work was to build a smart connected care solution. This smart connected health solution aims at tracking the current status of the person in terms of heart-rate, calories burnt, current location, etc. This project involves a Fitbit watch which constantly keeps track of the person's personal details as mentioned above. After that, the data is fetched from the fit-bit watch to device cloud and then on to our machine using O-auth 2.0. For extracting data we need to communicate to Fitbit using their Fitbit API's(application programme interface) which are pre-defined. On successful communication, we get access to the data which we need to store in a database. Therefore we create a database and store the data. Also to get data updated after the fixed interval we set ajax call in such a manner that data gets auto-updated on an hourly basis. Once this is done we display the data in a tabular form to the end-user after averaging each day,s data in a weekly report format. In this way, we aim to connect your health from episodic care to continuous care. Tool used (Development tools - H/w, S/w): Python, Django, HTML, CSS, JavaScript, jQuery, Ajax Objectives of the project: To make a web portal to display the weekly report from the data recievedthrough smart device through data analytics the device to the portal developed for further analysis using oauth. Major Learning Outcomes: Python, Django, HTML, CSS, JavaScript, jQuery, Ajax Details of Papers/patents: None Brief Description of working environment, expectations from the company: The environment was quite good. Team members were very helpful. In a nutshell, you will have a lot of time to explore and learn new things. Academic courses relevant to the project: None Student	2019- 20- sem1

Company	Experience	Year
Tata Consultancy Services, Bangalore	The project was about home automation using ZigBee protocol. So, a customized home automation profile was supposed to be developed and a gateway to be created so that it can communicate over IoT Tools used (Development tools - H/w, S/w): qtcreator, beyondstudio by nxp, JN 5168 board Objectives of the project: - The project was about home automation using ZigBee protocol. So, a customized home automation profile was supposed to be developed and a gateway to be created so that it can communicate over IoT Outcomes of the project: I was able to establish communication between coordinator and end devices, device mapping for IP address and accordingly mac addresses, basic timer's application on service layer for scheduling requests between server and network layer Major Learning Outcomes: C++, hands on experience of using C++ over different API's, hardware interfacing Brief Description of working environment, expectations from the company:the working environment was good and friendly initially I was not able to cope with the speed of other employees but once I learnt how to use api functions it was a good experience working for one of the biggest IT industry in the world	2016- 17- sem1
Tata Consultancy Services, Bangalore	Application Framework for IOT Tools used (Development tools - H/w, S/w): Xcode, Mobilefirst, Cordova Objectives of the project: Application capable of talking to both IOS and non-IOS base accessories using an intermediate gateway and has a web-view interface Outcomes of the project: Application capable of talking to both IOS and non-IOS base accessories using an intermediate gateway. Major Learning Outcomes: Application Development, Hybrid Applications, Home Automation Brief Description of working environment, expectations from the company:Professional,hard-working and motivated employees working in different domains. A Lots of facilities and a well-regulated environment. However, I would still give 4/5 for the environment. Company expects discipline, hard work, dedication from the intern. Mentor Designation: Member, Technical Staff The students are working on DM365 processor. They were quick in getting the concepts and start working on project. If students have some good knowledge of Embedded systems with C/C++ programming, Linux experience and ARM architecture experience is good. Overall students are performing well. Faculty At Tonbo Imaging students are working on various project areas like Image Processing, FPGA programming, Electromagnetic Interference Shielding, Machine Design and Drawing. Students are working on projects like Implementation of State Machine in Asynchronous Communication, Developing a new display frame work for a thermal imaging camera etc. Operating systems, C++, C programming, Image processing, Embedded systems, CAD/ Solid works, mechatronics, robotics, manufacturing engineering computer graphics (frame buffers), ARM Architecture are some of the skill set expected by the organization to work on various projects. The skill gap training sessions will help the student to be better prepared for PS II. They can brush up the basic concepts before they come for internship. Student	2016- 17- sem1
Tata motors limited	Eliminating rework for new model vehicle's that rolled out from D3 or H3 block by improving process maturity of production line Tool used (Development tools - H/w, S/w): Info fitment drawings, MS Excel Objectives of the project: Eliminating rework on vehicle trucks Major Learning Outcomes: Management process, Manufacturing process Brief Description of working environment, expectations from the company: Working environment was good and very helpful Academic courses relevant to the project: Material science Name: Awaneesh Shukla (2015ABPS0864P)	2018- 19- sem1
Tata motors limited	Working with industrial experts, I worked on reducing the throughout time for Tata Winger assembly line. The project involved data analysis of T.T.T. for past months and doing a bottleneck analysis. Following which I studied the operations and stations which could add most to TTT. The next phase involved working on defect elimination and making design changes to make the process more efficient and less time consuming. Overall the experience taught me the practical application of some of my discipline courses, helped me build professionalism and improve my ppt skills. Tool used (Development tools - H/w, S/w): Lean Manufacturing Objectives of the project: Reduction of throughout time of Tata Winger Assembly Line Major Learning Outcomes: Practical knowledge of assembly line operations and application of lean tools, design reviewing and change procedure Brief Description of working environment, expectations from the company: Work environment is very professional and all the industry experts I interacted with guided me for my project. Tata Motors provides a number of avenues for learning every aspect of automobile manufacturing and I am glad I could make the most of my time at the company. Academic courses relevant to the project: Supply Chain Management, Lean Manufacturing	2018- 19- sem1

Experience Year Company I worked on proposing layouts for the improvement of Gearbox-Clutch Housing assembly area, learning about the process, man-material movements, the tools involved and performing time studies for the same and also preparing Gantt charts. Making the current layout of the area on AutoCAD and proposing new ones to reduce the current commotion and manmaterial movements, and hence removing the bottlenecks. I worked on my 2nd major project of Kitting Store Shifting. So there was a lot of cross movement when it came to Trim Line 2 and 3. The whole objective was to relocate the stores (zone wise) and pull the subassemblies to the area between the 2 lines so as to improve supervision and communication with the production team. A lot of data collection was involved in this project, post which the new layouts were proposed and the implementation of the same took place during the Diwali holidays. Tool used (Development tools - H/w, S/w): AutoCAD, MS-Excel Objectives of the project: Propose a new Kitting Store layout for Trim Line 2 and 3 area. The project had multiple objectives; firstly to reduce the distance moved by kitting trolleys from the Kitting Stores to the feeding station, secondly to segregate the subassemblies from the Kitting Stores and relocating them at an appropriate place and thirdly to ensure that 2018-TATA Motors Limited, only moving parts are being stored in the Kitting Store. At present the Kitting Center besides line 2 caters 19-Lucknow to cabs of both Trim Line 2 and Trim Line 3 whereas Kitting Center beside Trim Line 3 caters to cowls of sem1 Trim Line 2. There's a lot of unnecessary movement of man and materials in this case. The objective was to shift the contents of the kitting centers in a planned and phased manner. Major Learning Outcomes: The learning outcomes were immense, specifically how organisations of such large a stature work at the ground level, the interdepartmental dependence involved in its working. Coming to the project, I learnt to learn about Logistics management - how it is the most important pillar of a manufacturing industry. Being in the Planning Department, I had to communicate to a lot of people from other departments which even helped me to up the confidence in me which was lacking before. Brief Description of working environment, expectations from the company: The working environment is quite conducive. It's good for the people who want to work, plus a lot depends on the mentor that is being allotted to you; I was fortunate enough to get an excellent mentor. The work timings (8:30 - 5:00 for 6 days a week) sometimes felt a bit harsh, but all over the working environment is good with no major disappointments. Be ready for a number of line visits, spending hours on a stretch on the production line. Academic courses relevant to the project: Engineering Graphics Production Planning and Control Name: Deepankar Shahi (2015ABPS0862) • Collection of fitment drawings related to the processes. • Preparation of a Critical to Quality (CTQ) list of the processes studied. • Analysis of all the gauges and machines installed for the process. • Standardization of all the processes using Process Observation Check Sheet (POCS), Standardized Work Combination Sheet (SWCT), Spaghetti Diagram. • Preparation of a modified Process Flow Diagram (PFD). • Preparation of PFMEA for the processes involved on the station. • Modifying the Control Plan (CP) and Work Instruction Sheets (WIS). • Analysis of torqueing data through Process Performance Analysis (Pp ppk) and Process Capability Analysis (Cp. cpk). • Process Validation and defect monitoring after implementation of suggestions. Tool used (Development tools - H/w, S/w): • Standardized Work Combination Table(SWCT) • 2018-TATA Motors Limited, Process Observation Check Sheet (POCS) • Process Failure Mode and Effect Analysis (PFMEA) • Spaghetti 19-Lucknow Diagram • Process Performance Analysis (Pp\_ppk) • Process Capability Analysis (Cp\_cpk) • Process sem1 Validation (Turtle Diagram) Objectives of the project: To declare 3 stations at Assembly Line 2 as Zero Defect Stations Major Learning Outcomes: • Information regarding part numbers, functions and specifications of all the parts and tools involved in the process and the drawings for the same. • Torqueing values for all the bolts. • List of Critical to Quality (CTQ) parameters • Original Work Instruction Sheets (WIS) and Control Plan (CP) • Movement of operators on assembly line (non-value adding activities) • Time analysis of processes • Defects occurring in the fitment. Academic courses relevant to the project: Manufacturing Management and PPC helped me in carrying out the project. QCAR would have helped me in enriching the quality of my work. Name: Pranjal Sarin

Company Experience Year

Firstly I Studied what is PFMEA.Then I did the PFMEA(Process Failure Mode effect and Analysis) Gas Shutoff Valve and Wheel Balancing. Then I Studied about the critical Parts of LPO-1515 55 and LPO-1618.I then saw where all the critical parts and main parts like Suspension mounting, axle fitment Engine Mounting etc are done. Firstly I checked the mode of Tightening (Impact Gun or Impact Gun with torque wrench or DC tool or Pulse Gun) Then I checked whether the tightening torque is followed as per torque specification or not. Along with Torque study I am also responsible for testing the new beading which has an extra tube inserted at the A pillar and B pillar upper and lower end respectively. This change is made because as per flange made in Cabin is not as per design. Flange is generally bent or is at a wrong orientation angle. Apart from these 2 issues flange at b pillar lower side is outside the B pillar side while it should be inside as per Design. Due to new beading's there is a drastic change in water leakage. Tool used (Development tools - H/w, S/w): MS Excel Objectives of the project: Testing and Analysis of Production Procedures for source identification and mitigation of defects. Major Learning Outcomes: i)PFMEA of Various Processes-Gas Shutoff Valve, Wheel Balancing ii) Torque Study of Critical and Major joints-of Vehicle LPO (Long Platform Overhanging)-1515 iii)Analysis of Newly Designed Beadings in Shower Test Brief Description of working environment, expectations from the company: The Plant is divided into 2 parts eastern complex and western complex. Western Complex consists of Trim line-1,Assembly Line1 and Integral Bus Factory and Assembly Line4(Special project Line). While Eastern Complex consists of Trim line-2,3,Assembly Line-2,3.There is also a training Center in which we all had a 3 day training session and also a induction program of a week which we all attended. Except of Assembly Line4 each line has a conveyor belt. The plant has a Transmission Factory. It is responsible for Gear parts, crown wheel and pinion, and heat treatment facility. The plant also has its own Engineering Research Centre which focuses on buses. Facilities include a digital prototyping lab, use of PLM software, Catia etc. There is a testing site in the eastern complex. The Eastern Complex houses state-of-the-art facilities like a paint shop, BIW shop, and TCF factory with automated lines. A day at Tata Motors Limited, Lucknow starts with a SDT (Self Directed Teams) meeting where focus is given on taking safety while performing operations and discussing a recent case (maybe on the road, at home, in the plant) where an accident had occurred and pondering upon the reasons why did it occur and how could it have been avoided if the victim had followed the appropriate safety procedures. TATA Motors' target metrics reads as SQDCME (Safety, Quality, Delivery, Cost, Morale, Environment) thus giving Safety a priority over above metrics. There are SQDCME display boards displayed up all along the lines,making it easier for a visitor to gauge the level of safety being followed in carrying out the operations. Each day, everyone gets an email on the news of TML, Lucknow which contains a safety tip without fail. The Expectations of the company from employee is to work efficiently so

TATA Motors Limited , Lucknow 2018-19sem1

Tata Motors Ltd., Sanand

Productionalization of two models Tiago and Tigor i.e. Mid cycle enhancement. The product goes through different stages or shops like press shop, weld shop, paint shop, TCF shop. Production of product is divided into batches like alpha, beta 2.0, beta 3.0. During production batches the problem faced were corrected one by one. Tool used (Development tools - H/w, S/w): Excel, SAP. Objectives of the project: Productionalization of two model Tata Tiago and Tigor Major Learning Outcomes: Learned about product journey, till it's completion and problems faced and actions taken. Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment was like other corporate job sector. Academic courses relevant to the project: Kinematics of machines, fluid mechanics, Production techniques 1 and 2 etc Student

that error occurrence can decrease and also to increase the profits by increasing the amount of Vehicles produced. For this to happen every engineer is given a project to decrease Muda, Muri and Mura. Why Why Analysis is done in every project and also Fishbone Diagram is made in most of the projects. Academic

courses relevant to the project: Machine Design and Drawing, Engineering Graphics, PPC

2019-20-

sem1

Company	Experience	Year
TATA motors Ltd., Pantnagar	Work involved deep understanding of the assembly line which makes one capable to think of the relevant process parameters regarding your project. My project was about a chronic problem of timing belt failure in one the engines which was costed company almost INR 20 lacs p.a. Project will help gain knowledge of some industrial tools which are used to ensure quality of a product. Project requires multi-dimensional thinking and data analysis to predict potential failure modes, validation of those failure modes and implementaion of precautionary measures capable of completely eradicating a part or process issue. You'll in the end enhance your observation skills as well Tool used (Development tools - H/w, S/w): Structured problem solving advanced, VBA programming Objectives of the project: Failure analysis of Timing belt in 800cc DICOR engine which to help company ensure reliability on their product and reduce experience expenditure on repairs for the same. Major Learning Outcomes: Industrial methodologies, Observation skills, Critical thinking, Team spirit Brief Description of working environment, expectations from the company: To get a work done for an intern here is pretty challenging as most of them instead of taking interest towards your work take it as a burden and irrelevant. Always keep in touch with senior most authority mentoring you. That will help one keep the project on the right track otherwise one can end up wasting a lot of valuable time Academic courses relevant to the project: Automotive vehicles, QCAR, I C Engines Student Name: Anurag Rallapalli	2018- 19- sem1
Tata Motors, Pune	Implementation of partial/fully automated, in-house developed machines to improve on the following factors Safety Fatigue Quality Cost Tool used (Development tools - H/w, S/w): Machine Tools, Machining equipment, AutoCAD, Objectives of the project: Multiple Projects with different objectives Major Learning Outcomes: Industrial Professionalism, Corporate Bureaucracy, Production Line operations and maintenance, Project management Brief Description of working environment, expectations from the company: The department allotted was LOW COST AUTOMATION (LCA) under BUSINESS EXCELLENCE SERVICES (BES). I was with one other student from Goa. Being in a automation centric department we expected the work and the work culture there to be highly advanced and professional. But, we were sad to see that it was not the case at all. Our projects were really great and interesting and we enjoyed working on them. But, the problem was the people there (our tata motors mentor), they were too much to deal with. It has been one of my worst work experiences, solely because of the work culture. If you need more details contact me on the provided mail id Academic courses relevant to the project: EG, Machine Design and Drawing, Mechanics of Solids, Kinematics and Dynamics of Machines Name: Saurabh kumar (2015A4PS0337G)	2018- 19- sem1
Tata Motors, Pune	Worked in Low Cost Automation dept. which mainly focuses on automating different in-line processes to improve safety, fatigue, cost and quality. I worked on 5 main projects including 2 individual projects and 3 team projects. Individual projects include (i) Washing and a drying unit for proper disposal of hazardous waste of used gloves at ETP. (ii) 3-axis slider for visual inspection of engraved serial no. on cylinder block and mb caps. Team projects include: (i) Automation of cab tilting process (ii) Automation of Spot weld gun tip dressing process (iii) Cable wire insulation stripper Tool used (Development tools - H/w, S/w): AutoCad, Festo, and various H/w tools including Lathe machine, Drilling machine, various welding tools, etc. Objectives of the project: Automating different in-line processes to improve safety, fatigue, cost and quality. Major Learning Outcomes: Professional environment, knowledge of different processes involved in vehicle development, various automation tools, etc. Brief Description of working environment, expectations from the company: The work/project assigned to me was very challenging and satisfactory but the work environment was not that good and need to be improved a lot mainly on professional grounds. Academic courses relevant to the project: Automotive vehicles, Production Technique II	2018 <sup>-</sup> 19- sem1
Techture Structures (IT) , Nagpur	development of application that runs on Revit software and is a part of cloud based application named plan BIM. In the development of this project I have worked on everything except for database management. Tool used (Development tools - H/w, S/w): Visual Studio, Postman, Autodesk Reivt Objectives of the project: To create a plugin(addin) that runs on revit software and is extenion of a cloud application named planBIM Major Learning Outcomes: .NET Framework, MVVM Model, XAML, WPF, Threading, Hashing etc. Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment is decent, employees are also helping in nature. As holidays and leaves are strictly managed, you should expect more workload and less free time. The project that is in progress is web based, mobile based and software interactive. So you have to work on any of these fields or database management that requires postgreSQL. Academic courses relevant to the project: Object Oriented Programming, C Programming, Operating System, Database Management System, Data Structure and Algorithm, etc. Brief write-up on PS-II station: Students should have done courses on Quality Management, Industrial Engineering. Texmaco: Students should have interest in Material Science, Mechanics of Solids. Student	2019 <sup>,</sup> 20- sem1

Company	Experience	Year
Techture Structures Pvt. Ltd, Nagpur	I worked on BIM (Building Information Modelling) during the Practice School - II period. I worked on ASI & MEP Modelling. Tool used (Development tools - H/w, S/w): Autodesk REVIT Objectives of the project: MEP 3D Modelling & ASI 3D Modelling Major Learning Outcomes: Thoroughly learned about the REVIT software Brief Description of working environment, expectations from the company: There were no big expectations from the company, just need to learn the software required for the project & the work environment was healthy. Academic courses relevant to the project: No courses are needed to do the project. Student Name: Shriya Gune Tool used (Development tools - H/w, S/w): Open Air Interface, C Objectives of the project: To optimise the LTE architecture Major Learning Outcomes: In detail about the LTE networking architecture Academic courses relevant to the project: MTN, TSSN Name: Anish Kumar (2014B4A30406G)	2018- 19- sem1
Tega Industries SEZ Ltd , Dahej	Our work is to observe and try to solve the problems faced by various departments involved in production. The work I have done is improvement of design ( shrinkage analysis of rubber when reinforced with steel or casting), and also design of rack for better utilisation of storage space and movement. Tool used (Development tools - H/w, S/w): AutoCAD, Fusion 360. Objectives of the project: To make life easier for the people involved in production and achieve maximum efficiency. Major Learning Outcomes: How work is done in industry, the planning and co-ordination required for smooth going of production process. Various machinery used in rubber industry. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment is good enough and the company expects us to deliver the goods in less time and also do more work Academic courses relevant to the project: Mechanics of Solids, Production Techniques. Mentor Mentor comments: The students have applied DMAIC principle in the reduction of non-value added activities, reduction in wastage and made blank maunufacturing process less manual dependent. The student has done a commendable job in repairing a jammed roller at the end of feeding conveyor which was causing frequent jams in the process. The student has designed proper jigs and fixtures to ease the loading and unloading process. Did time study of 14 different lifter bars and made a process study with the aim of reducing the cycle time. The students are very hardworking and collected data from the plant for analysis and decision-making. Student	2019- 20- sem1
Tejas Networks	We worked in the domain of upcoming 5G network. Our work involved understanding key elements involved in the network architecture and identifying the scope for improvement in any area that may directly or indirectly benefit Tejas Networks. For this, we worked on designing and implementing a Relay Node proposed in a patent that was given to us and to make sure it is LTE compliant and/or suggest any changes/modification if required. The nature of work was related to open source code development for the implementation and simulation of the network elements involved along with proposed changes. Tool used (Development tools - H/w, S/w): OpenAirInterface, WireShark, GIT, Netlink Objectives of the project: To design and implement a 3GPP LTE complaint Relay Node that should work in the upcoming 5G LTE network without making significant changes to the other network elements involved in the LTE architecture. Major Learning Outcomes: 1)Open Source Code Development 2) Knowledge of LTE architecture 3) Knowledge of OpenAirInterface 4)Knowledge of GIT Details of Papers/patents: Details of Patent are confidential under the NDA signed with Tejas Networks. Brief Description of working environment, expectations from the company: The working environment is good, if one himself/herself takes the initiative. Tejas Networks is a telecommunications company, so at the end of the day, its work focuses on developing products for telecommunications service providers, internet service providers, utility companies, defence companies and government entities. It's a good PS2 station for ECE students who want to pursue a career in telecommunications domain. Academic courses relevant to the project: Communication Networks, Mobile and Telecom Networks Name: Venkatesh S (2015A3PS0275P)	2018- 19- sem1
Tejas Networks	Our project was to build an oscillator characterization environment in order to test the performance of oscillators with variation in temperature. We sense the temperature of the environment using an analog temperature sensor. This signal is then passed through a RC damper circuit to filter out noise and fed to the input of an analog-to-digital converter(ADC). The signal is converted to the digital domain and sent to the Raspberry Pi controller. The controller uses a control algorithm to generate a control signal. This control signal is in the form of a PWM signal of 3.3V. This signal is stepped up to a 12V PWM signal by the control element. The temperature of the heating element (Thermoelectric module) is then controlled by this signal. Tool used (Development tools - H/w, S/w): LTSpice, Raspberry Pi, Python Objectives of the project: To build an oscillator characterization environment in order to test the performance of oscillators with variation in temperature. Major Learning Outcomes: Interfacing to Raspberry Pi, Coding in Python, Tuning a PID loop, Parameters used to Characterize Oscillators. Academic courses relevant to the project: INSTR F343 Industrial Instrumentation & Control Name: Tushar Kaushik (2014B2A80349P)	2018- 19- sem1

Company	Experience	Year
Tejas Networks	High-voltage DC-DC converters are used in various equipment, like medical X-ray imaging, traveling wave tubes, RF generation, and electric vehicles. Buck PhaseShifted (PS) full-bridge (FB) converter featuring high voltage attenuation, immunity from transformer flux imbalance, simple structure for multiple outputs, and zero output inductance are the preferable choice for such output voltage applications. Tejas Networks uses analog IC controlled DC-DC converter for its server power supply. Due to various drawbacks of using analog control; for example the aging of components, bulky design, less flexibility as analog schemes require a lot of modifications to adapt to different requirements etc, the power engineers have realized that the industrial trend of digital power has to be now adopted. I worked on designing a DC-DC converter for server system. Tool used (Development tools - H/w, S/w): PSIM, MATLAB, SIMULINK, powerSUITE Objectives of the project: Design of digital control scheme for Phase Shifted Full Bridge DC-DC Converter Major Learning Outcomes: Control System Design for Power Electronics Applications Brief Description of working environment, expectations from the company: Knowledgable mentors but not too interested in working with interns. Academic courses relevant to the project: Control Systems, Power Electronics, Analog Electronics Name: SRI HARSHA VIGNESH KASAM	2018- 19- sem1
Tejas Networks	Synchronisation of systems by characterization of crystal oscillators Tool used (Development tools - H/w, S/w): Hardware labwork Objectives of the project: To create a chamber in which temperature can be controlled so that it can be used for oscillators testing. Major Learning Outcomes: About various hardware components like tem and aslo get to know raspberry pi usage in advance level Brief Description of working environment, expectations from the company: Working hours are flexible but work environment is not so friendly, but a very decent office. Academic courses relevant to the project: Analog electronics, measurement techniques, industrial instrumentation & control	2018- 19- sem1
TESCO	Work was good and required analytical knowledge to continue. Tool used (Development tools - H/w, S/w): SQL server, teradata,VBA,Excel microstrategy Objectives of the project: To develop a forecasting model Major Learning Outcomes: Data science Brief Description of working environment, expectations from the company: People are good and helpful and managers push you learn more inorder to deliver Academic courses relevant to the project: Statistics	2018- 19- sem1
TESCO	Automating & Creating tableau dashboard and working on the work flows required for the automation Tool used (Development tools - H/w, S/w): SQL, Alteryx, Adobe analytics, tableau Objectives of the project: Automation of Titan Dashboard Major Learning Outcomes: Tableau and Alteryx Name: Yashwant Chourasia (2014B5AB0603P)	2018- 19- sem1
TESCO	Project was regarding store level range performance. Extracting the store data from data warehouse and creating a visualization of major KPI'S in tableau was the task. As I was directly involved with the stakeholders, got to learn alot about what goes in store and the process behind it. All the major concepts of supply chain becomes relevant. Tool used (Development tools - H/w, S/w): Teradata, Tableau, Hadoop Objectives of the project: Range performance post an event launch. Major Learning Outcomes: Varoius tools that are used by an analyst. The store level detail of range and their display. Brief Description of working environment, expectations from the company: The environment in Tesco is very friendly and the teams are very helpful. Academic courses relevant to the project: SCM, Project Appraisal, Engineering Optimization.	2018- 19- sem1
TESCO Hindustan Service Centre , Bangalore	I was in Store & Channel insights team at Tesco, which is one of the best teams in analytics division here. Our work involves solving business problems faced by Tesco in UK & rest of the globe with the help of data & strategy. My major projects involved producing a high impact periodic report for the store managers in UK to build the gap between them & the business. I automated the process of sending the health card across using VBA. My other project involved analysing the shopping trend of Tesco colleagues & recommending strategies for them to increase the stickiness. Tool used (Development tools - H/w, S/w): Excel, VBA, Tableau, SQL, Hive, R Objectives of the project: Building automated dashboard & reports for checking performance of each store (2666) Major Learning Outcomes: 1. Stakeholder management 2. SQL, VBA 3. Business problem solving Details of Papers/patents: - Brief Description of working environment, expectations from the company: The work culture is very nice over here. A lot more of ownership than you can expect from a big company like Tesco. The campus is one of the best campuses in Bangalore, which keeps you constantly motivated. PPO chances are good if you are passionate about your work & take up lead here, projects are mostly related to analytics & not much about data science. Academic courses relevant to the project: I did a small project in supply chain which kind of helped me kickstart with retail domain.	2019- 20- sem1

Company	Experience	Year
TESCO Hindustan Service Centre , Bangalore	Tesco is a retail giant based primarily out of Europe. In the course of its business, massive amounts of data are generated from customer activity. Upon analyzing this data, a number of useful metrics tracking the company's performance across sectors and functions can be created. Over the course of my project, I built and automated reports measuring critical KPIs week-on-week. Tool used (Development tools - H/w, S/w): SQL, Excel, Alteryx Objectives of the project: Building and automating One Pager reports Major Learning Outcomes: - Knowledge of SQL, Advanced Excel tools - Better understanding of retail operations Details of Papers/patents: - Brief Description of working environment, expectations from the company: Working environment was generally relaxed. Interns are assigned mentors to guide their progress and help complete their projects. Nature of work varies significantly between teams. Academic courses relevant to the project: - Mentor Mentor comments: The student is given a research project. The different phases of the project include determining the chemistry of the given sample using spectrometer, learning about the various heat treatment processes mainly Normalizing, Quenching & Tempering, working principle of V-Notch Charpy Impact Test, studying the microstructure of the given sample. The data collected refers to the effect of heat treatment on the properties of a material mainly hardness, tensile strength, elongation, etc. Different samples of varying chemical composition were subjected to different heat treatment process(es) and mechanical testing of the samples was done after that. The data was analysed to compare the expected values to actual values. The student need to go through various reseach papers and do the literature survey. Mentor Mentor comments: Three projects A. Data analysis and Game designing B. Web portal for two internal projects. One has gone live and the other will be launched soon. C. Applying machine learning model for task prediction and text tagging. 1. Interactions with the	2019- 20- sem1
Texas Instruments	Design of Auxiliary Power supply unit Tool used (Development tools - H/w, S/w): Altium Objectives of the project: Used in end Equipment of Server Power Supply Major Learning Outcomes: Practical exposure through work at high voltage lab Brief Description of working environment, expectations from the company: Very comfortable, no strict timings, judged on the basis of enthusiasm and deliverables Academic courses relevant to the project: Power Electronics Name: Vishal Asnani (2015A8PS0392G)	2018- 19- sem1
Texas Instruments	All the devices in today's world communicate with each other using standard protocols. To test whether the data sent is correct or not can be very cumbersome. The protocol commands are called into the test program of the chip to vary different characteristics of the device. These commands generate different test patterns at the run time of the program thereby increasing testing time. I made a Perl script which will create the test patterns for the corresponding command. These patterns can then be appended in the test program beforehand thereby decreasing testing time. Tool used (Development tools - H/w, S/w): Perl, Labview Objectives of the project: Pattern based testing Major Learning Outcomes: script and labview code making Academic courses relevant to the project: ADVD Name: Vidhan Jolly (2015A3PS260P) Tool used (Development tools - H/w, S/w): Cadence Allegro, Labview, teststand Objectives of the project: Post Si Validation of Z1914 Test chip which incorporates low power analog Ips used in supervisors products. Major Learning Outcomes: Design of Test circuits and boards Automation using Labview and Teststand Understanding and debugging of critical low power analog IPs used in power management ICs Debugging and finding flaws within circuits using schematics Academic courses relevant to the project: Analog electronics, ADVD, Microelectronics circuits, Digital design Faculty Name: Satya Sudhakar Yedlapalli	2018- 19- sem1
Think and learn , Bangalore	Development of two web portals viz Employee utility portal and Recruitment portal. Initially, both the portals were basically a combination of google sheets. I used PHP for the backend of first project. It was developed on Lampp stack. The recruitment website was developed using Node.js framework Express.js. I also used OAuth and Calendar API in this website. The database of both the project were designed and developed using MySQL. Tool used (Development tools - H/w, S/w): PHPMyAdmin, Zing Charts, Codeigniter 3.2, Express.js Objectives of the project: To develop employee utility portal and recruitment website. Major Learning Outcomes: JavaScript, JQuery, AJAX, PHP, PHP CodeIgniter, Node.js, Express.js Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The working environment is friendly and supportive. It was a pleasant experience. Academic courses relevant to the project: Object Oriented Programming Student	2019- 20- sem1

Company Experience Year

Designed a new PCB, starting from the analysis report on power requirements, the schematic, PCB layout and gerber. The entire design team included of 3 people. But the electronics design was completely monitored by me. The design was done on KiCAD for the pcb-so understanding the software and tools for simulation was also entailed in this project. The design required a complete study of the product and it's design. The new battery management system that was installed with the battery in the product not only charges battery but gives a real time report on the performance of the product. It is programmable so can be altered as per future use. As a part of the project it was also entailed that we use this design to make a prototype and test it. the testing process and methodology was also devised by me under the quality assessment project. The product is an electronic device and to be market ready it should follow certain international standards-CE/FCC/IEC. a detailed research about under what directives of these standards does the product come was also carried out ,to ensure the design is safe for use. Tool used (Development tools - H/w, S/w): KiCAD, Ms Excel, Objectives of the project: Design a PCB for smart battery management system Major Learning Outcomes: PCB Designing Smart Battery management system software- KiCAD Testing methodology Brief Description of working environment, expectations from the company: Thinkerbell Labs is a perfect example of a startup environment which provides you the time and right guidance to learn and pursue your interests while being beneficial to the company. The entire team of Thinkerbell Labs is a group of fantastic engineers working towards making the education inclusive for all. Their constant enthusiasm to work hard, their accuracy in the work even under extreme pressures motivated me a lot. The company expects you to work efficiently and complete the tasks provided before deadlines, while simultaneously working with other members of the team and helping them with other

projects. The company welcomes any suggestions for improving efficiency, productivity and improving the work environment. As a part of professional development, I had a few chats with my team, colleagues which were very encouraging. I was communicated to on places where I need to hone my skills further. This was very helpful for me both professionally and personally. Academic courses relevant to the project:

Analog electronics, power electronics, microelectonic circuits Name: Swaraj Budhavaram

(2015A4PS0329P)

2018-19sem1

Thinkerbell Labs Bangalore

The nature of works I have done are Market research to identify the beneficiaries of the product in India and Public policy, financial budget analysis. This enables the company to have a smooth process of sales with the Governments of different states. Minor project works include: 1. Handling the entire process of participation in startup competitions and accelerator programs which basically provide funds, a network of investors, marketing and sales leads. 2. Public policy analysis and financial budget analysis of different states for the benefit of visually impaired for B2G sales. 3. Setting up and managing the Customer Relationship Management process. Tool used (Development tools - H/w, S/w): CRM software, MS Excel Objectives of the project: The objective behind this project is to generate ideas that will increase the Sales of Annie – Braille teaching device. We want to sell the device and install smart Braille classes in all Govt. schools for the blind and the Pvt. Schools aided by Govt. For that to happen, one must have a good idea about the schemes, policies and budget allocations by the Govt. for the visually impaired. We also want to sell our device through CSR projects of other companies and also to individual customers. In order to achieve this, we have to organize all the existing leads, set up and manage customer relationship management processes. We conduct market research to identify leads in various sectors including schools, NGOs, Govt., CSRs and for other strategic partnerships. Major Learning Outcomes: Key Learnings and their respective domains are: 1. Leadership – process setting and internal management 2. Sales - Customer Relationship Management 3. Sales - Market research 4. Public Policy - Government budgets, policies, and schemes 5. Soft skills - Team Working, Presentation skills, and decision-making skills 6. Fundraising process of Startups, Startup environment. Brief Description of working environment, expectations from the company: Thinkerbell Labs is a perfect example of a startup environment which provides you the time and right guidance to learn and pursue your interests while being beneficial to the company. The entire team

of Thinkerbell Labs is a group of fantastic engineers working towards making the education inclusive for all. Their constant enthusiasm to work hard, their accuracy in the work even under extreme pressures motivated me a lot. The company expects you to work efficiently and complete the tasks provided before deadlines, while simultaneously working with other members of the team and helping them with other projects. The company welcomes any suggestions for improving efficiency, productivity and improving the work environment. As a part of professional development, I had a few chats with my team, colleagues which were very encouraging. I was communicated to on places where I need to hone my skills further. This was very helpful for me both professionally and personally. Academic courses relevant to the project:

2018-19sem1

Thinkerbell Labs Bangalore

Technical report writing, Public Policy

Company	Experience	Year
Thorogood , Bangalore	My profile during the internship was that of a Business Intelligence and Analytics Consultant. For the first two months of PS, we were enrolled in a training program by the company which involved being trained on various business intelligence tools in company domain. There was a case study given to us as an assignment to test our understanding out of the whole training program. I was then enrolled in an internal project of the company. I had to catch up with different web development tools as it involved designing an application for the company which will be used by all the consultants worldwide Tool used (Development tools - H/w, S/w): SSMS, SSIS, Microsoft ADF, Azure DataBricks, Angular, DjangoRF Objectives of the project: 1. To design an application for all the consultants worldwide which would enable them to enter the work they did on a particular day as well as the expenses they incurred for a particular task. This application will keep track of all these things and will Major Learning Outcomes: Data Analytics tools, Web development tools, Communication Skills Details of Papers/patents: Brief Description of working environment, expectations from the company: One of best working environments one could ever ask for. People are really supportive and motivate you to try new things. You don't get treated differently because you are an intern. Your opinions will definitely be considered if they are indeed helpful. Academic courses relevant to the project: Data Mining, Data Analytics, Object oriented Programming, Data Science Student	2019- 20- sem1
Thorogood Associates	I was responsible for the back end and front end development of an entire Business Intelligence system. Raw data would come from business which would be loaded and transformed into meaningful data. This would then be generated in the form of dynamic reports which would be sent to the business for analysis. My work involved lots of technical and business development, along with a lot of client interaction. Tool used (Development tools - H/w, S/w): S/w - SQL, SSIS, Tableau, PowerBI, Excel Power Pivots Objectives of the project: The build of an entire Business Intelligence system for a client. Major Learning Outcomes: Technical skills, Communication skills, Management skills Academic courses relevant to the project: DBMS Name: Rahul Bansal (2015A8PS0522G)	2018- 19- sem1
Thorogood Associates	Developing end to end business intelligence solutions for multi national corporations. Work involved creating systems on databases on SQL all the way till the front end in the form of dashboards that the clients could see. Work was client facing with regular client calls at least twice a week to give updates and discuss the progress. The work is very logic oriented and gives you a good insight into the working of multi national corporations. A lot of problem solving skills are needed to come up with solutions for the problems that the clients face. Work culture is great and everyone really helps you grow and develop. No pre requisite knowledge of any software is needed as the company trains you in all the involved technologies. Tool used (Development tools - H/w, S/w): SQL Server, SSIS, SSAS, SSRS, Tableau Objectives of the project: Analysing point of Sales Data Major Learning Outcomes: Great business insights and growth in technical understanding of business intelligence softwares. Brief Description of working environment, expectations from the company: The work environment is extremely friendly and everyone is willing to help you out in case of any issues that you face. The company follows a flat hierarchy and the senior level consultants are also extremely approachable and friendly. Each person is assigned a line manager who ensures that the person is properly fitting into the company and not facing any problems. The line manager also keeps a track of the performance of the individual through the course of the internship. The company expects you to have strong logical reasoning and analytic skills, be diligent regarding your work and be a fast learner as a lot of learning happens on the job. The work environment is very fun with lots of fun activities happening through the course of the internship. Each and every consultant is a part of these activities. Thorogood employees are hard workers but also know how to have fun. Overall a great place to start off your career. Academic courses relevant to the project	2018- 19- sem1
Thorogood Associates	Thorogood Associates is a business Intelligence and Analytics consulting firm and mainly deals with data. People with good enough experience teach all the softwares you would require during your internship and help you apply that knowledge practically as well. Tool used (Development tools - H/w, S/w): SQL, SSIS, SSAS, Tableau, QLIK Objectives of the project: Deliver BI solutions to clients Major Learning Outcomes: New softwares, Client relationship Details of Papers/patents: Cannot be disclosed Brief Description of working environment, expectations from the company: The working environment is amazing. People here actually encourage you to maintain a good work-life balance and to not work more than 8-9 hours during a day. Majority of the people in Thorogood are in the age bracket of 25-30, so it is very easy to connect and mix with them	2018- 19- sem1
Tonbo Imaging Pvt Ltd. , Bangalore	Embedded system software Objectives of the project: -Improvement of system software of Davinci DM365 processor Outcomes of the project: Completed the uvc video streaming application Major Learning Outcomes: Embedded systems Brief Description of working environment, expectations from the company:Good working environment	2016- 17- sem1

Company	Experience	Year
Tonbo Imaging Pvt Ltd. , Bangalore	Worked on implementation of image processing algorithms in VHDL on FPGAs. Worked on developing an application for quality testing of thermal video output. Tools used (Development tools - H/w, S/w): VHDL, MODELSIM,QUARTUS,C programming Objectives of the project: Image processing of thermal video for development of good quality thermal imagers Outcomes of the project: Developed a VHDL code for sharpening of blurred thermal videos and developed a C based application for noise parameters calculation Major Learning Outcomes: FPGAs, VHDL Brief Description of working environment, expectations from the company:Involves steep learning curve and good technical skills	2016- 17- sem1
Tonbo Imaging Pvt Ltd. , Bangalore	My work consisted of several projects. Keypad design, fin design, humidity control, emi shielding, painting and coating are the areas I worked on. Tools used (Development tools - H/w, S/w): Software: Solid works, ANSYS, MATLAB; Hardware: Arduino Due Objectives of the project: Design and Development of Sealed Enclosure for Optical Devices Outcomes of the project: Proper sealing was ensured for the enclosure along with efficient fin design for maximum heat transfer. The moisture content inside the enclosure was also controlled. It was also ensured that the enclosure conformed to MIL standards for painting and coating. Major Learning Outcomes: Industry standard sealing methods, standard design practices, engaging with suppliers and manufacturers. Brief Description of working environment, expectations from the company:Since Tonbo Imaging is a startup, the work environment was relaxed and a lot of flexibility and freedom was provided to interns. There were no fixed deadlines for projects. Employees were very helpful and assisted on every small problem we encountered. Faculty Walmart Labs works on many areas like Big Data and Analysis, Inventory management, merchandising etc. Students need to be aware of Web development tools, OOPS, JAVA etc., Few of them also work in Big Data Analysis and get the opportunity to explore R Programming, Python,Spark,Scala etc. The basic programming skills and willingness to learn new technologies and tools with minimal guidance or support is the need from the industry. If the students have the knowledge of OOPS, JAVA, Python etc. then it's easier for them to quickly gel with the teams they are allotted and get started with the projects. Student	2016- 17- sem1
Tonbo Imaging Pvt Ltd., Bangalore	Discipline: EEE My PS station is Tonbo Imaging. Bangalore. Interning here was the best experience i could ever get. I learnt a lot from this industrial setup. My major learning would be enhancing my coding skills which help in every field these days. Time spent here helped me to understand how industry works and how a growing start up works. Working here constantly was a new challenge for me. Solving different problems helped me to widen my gaze of knowledge. My communication skills, leadership skills and many more aspects of my personality were affected positively. I thank PS division to provide me such an opportunity. Kshitij Patil (2012A7PS024G) Discipline: Computer Science PS 2 experiences was a novel experience in terms of learning perspective. All the misconceptions that we had before PS 2 about working in the industry were cleared and we have a new outlook towards working in an industry. Major learning took place in the form applications of the projects completed. I learned lots of new concepts related to camera calibration, thermal sensors and processing on thermal videos. This was a novel experience as working on images and videos captured from thermal images is uncommon. During the learning process, I got to code in many languages in from C, C++ to matlab and python. The conversations with fellow employees were most fruitful. We got to learn a lot from their experiences in the industry and the knowledge they shared. The internship experience has definitely cleared all the doubts or misconceptions we had about working in the industry. The daily routine of an employee in any organization is very different from the daily routine at the college. Having expecting the change that the experience would bring the transition was very smooth. Working in industry was a good experience. I got to learn a lot of new concepts and met people with similar background and yet had variety of experiences. It certainly has changed my outlook towards working in an organization. Every day in the organization I learned somethi	2015- 16- sem1

Company Experience Year

in the industry and their expectations from fresh graduates. As an electronics engineer, we are taught courses in Digital design, Analog and Digital VLSI design. The course contents are so much that we usually don't get to see the bigger picture i.e. applications that these courses would have in solving real-world problems. My current project is related to Real time Video and Image processing. During the course of the internship, I have used software tools that were introduced to us in College but the application and the theory behind video processing is something that we weren't aware of. The combination of the theory learnt during the past 5 1/2 months and the knowledge gained from academic curriculum has helped us solve some of the high end problems. This programme has helped widen my knowledge about Real time signal processing. Having worked with essors back in college, we were only working with some 1D signals. But through this programme we have worked on implementation of some of the complex algorithms for even 2D and 3D signals. The projects that I have worked on has helped me widen my future career prospects. Because of this project I can apply for my Masters or even work in an organization that deals with similar fields. I can also apply as a research assistant to some of the best programmes in the country. PS II programme has been helped me transiting from an engineering undergrad to becoming a responsible engineer. This programme has opened up a lot of career opportunities for me and I am grateful to the institute for introducing such a brilliant programme. Suyash Yeotikar (2012A7PS023H) Discipline: Computer Science My learning during this period of 5 and half months as a part of the Practice School-2 programme has been steep. I have gained great depth of knowledge in the fields of Computer Vision and Image processing, pertaining to my projects. The reason behind this being that, the dataset being worked upon in Tonbo Imaging is unconventional, in the form of IR and thermal videos. As not much of external help was available over the internet, out of the box thinking was required to build algorithms for processing. During the tenure of the PS-2 programme, I have been exposed to the industry to a great extent which has led to me a better understanding of it's functioning. Apart from understanding how organizations function, I had opportunities of interacting with the client directly which helped me in understanding their requirements, and also how to go about fulfilling them. I have learned how one needs to take accountability of the work done, and ensure that work done is robust and efficient. The major take back that I have from this industrial experience is that, every employee's contribution is integral to a company's development. I have also learned that planning is as critical as the execution of the project. The medium for broadening my knowledge base has been mostly through reading of papers and through interactions with my mentor, who would provide me with a direction. Exploring the direction would be through reading articles and gaining knowledge of concepts through internet. My aim is to study Robotics and make a career in it. One of the major premises of work of Tonbo Imaging is Computer Vision which is also a very important part of Robotics. The projects and work done in Tonbo Imaging has given me an insight on the kind of work that I will have to do in future, if Robotics will be my career path. Apart from gaining knowledge, it gives me immense satisfaction to have completed the challenging projects assigned to me which I consider to be an achievement.

U.S.T Global, Trivandrum Campus Developing a platform that allows third parties to execute algorithms deemed secure by data providers like Google, Facebook etc. on the data bases of those of those data providers, and obtain responses that do not disclose any personal data of the individuals. This ensures privacy of users remains intact by making sure data never leaves the data provider's server, as third parties might be vulnerable to security breaches, or unethical practices. Tool used (Development tools - H/w, S/w): Flask, Python, MySQL, HTML,CSS Objectives of the project: Making a Trust Platform Major Learning Outcomes: Learnt Open ID connect and OAuth, vetting of signatures and improved the python skills. Brief Description of working environment, expectations from the company: Pro-- Good amount of projects are available here, there is a lot to do if you have prior knowledge. The pressure is not that much. Con- Some Mentors are from non tech field and their attitude might be frustrating for some people. Academic courses relevant to the project: Computer programing, Object oriented Programming, DSA, Machine Learning

2018-19sem1

UBER, Hyderabad

My work consisted of automating the company's polices i.e, code JSON files and create API's and integrate it with the available backend endpoint created by the engineering team. Also maintaining various of dashboards of several line of businesses of Uber. Tool used (Development tools - H/w, S/w): JavaScript, SQL, Python, Visual Studio Code Objectives of the project: Reduces the agent handling time of the help issues created by the customers, decreasing manual intervention of agents, increasing the cost savings of the company by reducing investment on agent. Major Learning Outcomes: Understood the business context of how several Lines of businesses work. Details of Papers/patents: Brief Description of working environment, expectations from the company: The people, managers in the company are very cooperative, always encourage you to learn new things in way that your output could be optimised. They're always willing to help freshers/interns in any case of technical difficulties. It's a five day working pattern with 9 hours work each day. You'll be provided 2 trips daily between office and your home. Academic courses relevant to the project: probability and statistics, SQL

2019-20sem1

Company	Experience	Year
UBER , Hyderabad	My major project was to detect the fraudulent new users on the UberEats App. The project involved learning a few new languages, such as SQL and Cypher Query Language (used for graphical databases) and then building a model to predict whether the new signup is potentially a fraudulent user or not. Apart from these, there would be small projects required to build Dashboards, which was used by the stakeholders to get an overview of complex business metrics. Tool used (Development tools - H/w, S/w): SQL, Python and Microsoft Excel Objectives of the project: Detect fraud users using UberEats App as soon as they signup. Major Learning Outcomes: The major learning outcome I can take from this internship experience is time, stakeholder management and understanding the objectives of a company from a business point of view. In the technical side, I became proficient in working with SQL and Python. Details of Papers/patents: Brief Description of working environment, expectations from the company: The employees and managers in the company are very helpful and help you feel comfortable in the environment. You will be treated as a full time employee and would be responsible for your work and will be expected to meet deadlines. It's a five day working pattern with 9 hours work each day, however as long as you complete your tasks the manager wont mind if you leave a little early. Academic courses relevant to the project: The skills required for this role is different than what the academic courses teach. However you will be given ample time to learn the skills required and then work on projects.	2019- 20- sem1
UBER , Hyderabad	My work consisted of assisting Growth Team in making Dashboards and post analysis of the data obtained for various experiments conducted by them. Along with that, I have worked with the Green-light Team in successfully implementing their projects. Tool used (Development tools - H/w, S/w): SQL, Python, Google Sheets, Data Studio Objectives of the project: Optimising processes in Growth and Supporting GL and India BD team Major Learning Outcomes: Understood the business context of how several lines of business works. Details of Papers/patents: Brief Description of working environment, expectations from the company: The employees, managers in the company always encourage you to learn new things in way that your output could be optimised. They're always willing to help everyone in any case of technical difficulties. It's a five day working pattern with 9 hours work each day. You'll be provided 2 trips daily between office and your home. Academic courses relevant to the project: Probability and Statistics, SQL Group, Pune Student	2019- 20- sem1
UBS	I worked in reporting and analytics services, Finance Tool used (Development tools - H/w, S/w): Excel Objectives of the project: Prepared a report to be used by higher management to gauge team performance. Name: Yash Jain (2015A1PS0741H)	2018- 19- sem1

Company Experience Year

We, as a part of Data Integrity team, are currently trying to employ new techniques to automate the timetaking reporting processes and also trying to reduce the errors that can occur, to zero. We were given numerous reports that were generated on daily/weekly/monthly basis. The main goal will be to automate the reporting part of the work and focus more on the analysis of the work. Automating increases the quantity of the work and manually focusing on the reports and data. Most of the automation work was based upon the Visual Basic. It is an event driven programming language and associated development environment created by Microsoft. It is used to develop programs that control the Microsoft Office application. It has one of the largest user bases in business programming. VBA is easy to learn and the applications are infinite. VBA keeps performing the very same way each time it is executed. This reduces the chances of any deviation from the desired function. Moreover, VBA can also be modified to control outlook. Through VBA, we have worked on umpteen excel based function such as creating and navigating through files and folders, importing the data files, scraping data through SQL server, going online and fetching live data, drafting an email and so on. This has enriched our understanding of how the processes work in the background and gave us a systematic approach of all such applications. Tool used (Development tools - H/w, S/w): VBScript, SQL, MS Office Objectives of the project: My work at UBS is currently under the guidance of the senior lead as a mentee to understand the Day to Day business requirements and work expectations within the Data Integrity Team. I work on specific daily work assignments which are related to creation and publication of Reports along with analysis. I'm also assisting automation of many reporting processes right from downloading the data to publishing it. Major Learning Outcomes: In the last 5 months, we have gone through a vivid experience where we have enhanced not only the technical skills of ours, but the soft-skills and personality traits as well. We have learnt that the blend of business understanding and the technical background can work wonders in this industry and thus, is very reputed. Because getting the numbers is one thing, but only making sense out of it gets the job done. This was presented in front of the senior management who not only applauded us for the work that we had put in, but also wished the best for us. They were expecting us back at office as soon as we can make it, which is a big thing for us. Brief Description of working environment, expectations from the company: The working environment is very flexible and at the same time, everyone is dedicated to work. This is something we found different from the regular corporate settings. Academic courses relevant to the project: SAPM, FRAM. Name: Barun Mohapatra (2015A5PS0958P) Tool used (Development tools-H/w, S/w): Excel, R solutions, Bloomberg Entity Exchange, BOXI, RDC, Fenergo, DOCStore Objectives of the project: Periodic Review of UBS-IB clients Major Learning Outcomes: As this was my first experience in the corporate world the first major takeaway has to be understanding the protocols on which any large corporation works ranging from work culture & expected ethical standards to bottomlines . Our project environment is very similar to that of a startup, so the volatility in the day to day process flow as well as management will hold me in better stead in the future. As for technical knowledge I got to know a whole lot of information about the different types of products & client engaged, as well as the regulatory & Anti-Money Laundering guidances followed by investment banks. The types of client dealt with by these banks

UBS

2018-19sem1

First part of my internship was with Service Management team in Reporting and Analytics (Finance). The team manages access to the internal report sharing tool. This team does not work with any sort of financial data and usually does not generate reports for the company. However, the team has access to metrics from the report sharing tool which can be collated to present an overview of the various RAS teams. As an intern, apart from BAU team activities, I worked under the Executive Director of RAS (Finance) on developing a report from scratch, that would be helpful for higher management to assess team performance and take key decisions. I worked on developing KPIs using available data, to be used for assessing teams. As the report generation process is lengthy, I also created a macro to automate the process. The report was also presented on a global level to Managing Directors of various regions. If this model succeeds, this would be emulated for teams in other countries. Tool used (Development tools - H/w, S/w): Excel Macro Objectives of the project: Developing a report for management Major Learning Outcomes: I got an opportunity to look at the management side of banking. Brief Description of working environment, expectations from the company: The working environment is not too good in this team. The usual work is not hectic and so I got a lot of free time to go through their internal courses, the team however has practically no scope of learning, the systems/applications are internal and any learnings in this team would not be useful outside the team. Allotment to the team was random, I was the only one who was allotted a nonreporting team in RAS. I requested for a change but they didn't for this semester. Working under the Executive Director was a good experience and I got to learn a lot under him. PS experience here would depend on the kind of relations you develop with people. Academic courses

can range from pretty straightforward to extremely complicated which helped me get an idea about interacting with people from varying geographical backgrounds. As most of the client information is is 3rd

party restricted, so data management & secrecy is also pivotal. Name: Ashwin Shirbhate

UBS

2018-19sem1

relevant to the project: Principles of Management

Company	Experience	Year
UBS BSC, Investment Bank- Hyderabad	1st Phase of Internship (First 2 months) - I was asked to learn end to end work flow of an investment bank by working with different teams associated with the Trade Life Cycle of various financial instruments like Equity,CDS(Credit Default Swap),SBL,Derivatives,Bonds& PB. 2nd Phase of Internship- I was involved in a team which was tasked with reducing the amount of breaks occurring in the process of reconciliation of securities. Tool used (Development tools - H/w, S/w): MS Execl, Settlements & reconciliation Software-TLM Objectives of the project: Reconciliation of Securities & Breaks Reduction Major Learning Outcomes: 1. Indept experience of how an Investment Bank works and carries out it's day to day operations. 2. Detailed understanding about Trade life cycle, different types of Financial Instruments, Securities reconciliations & settlements. 3. Ability to streamline one's thoughts in a structured & logical manner. 4. How to write a Business case. 5. Data analytics using MS excel. Brief Description of working environment, expectations from the company: Organization's culture is too good. My co-workers were friendly & supportive. They were ready to help me out even when they were super busy. My line manager made sure that i was doing the right things in the right place at the right time even though he had a super busy schedule. Overall a pretty good experience. Academic courses relevant to the project: DRM, Fundamentals of Finance & Accounting, SAPM	2018- 19- sem1
UBS Business Solutions (India) Private Limited - Finance	I was working with the Finance group as a Financial Analyst in Corporate Lending, I was not assigned with any kind of project, I was doing the Actual work which is to be done by employees and I used to perform daily Profit and Loss Statements and Analyze the MTM with respect to the Market movements. I was also constantly in talk with the Front office established in US. I used to do the Validation and analysis of P&L. Also, Daily Balance Sheet Analysis and Commentary was also done by me, in B/S i used to do the analysis of Market movement with respect to our Daily P&L. Tool used (Development tools - H/w, S/w): MS Excel, SAP and oracle. Objectives of the project: Calculate Daily MTM with respect to Market movements and validating the numbers with Ledger. Major Learning Outcomes: How to Calculate MTM with Int&fese. How Price movement actually vary with respect to the Market Movement and How it affects a firm on the Loans side Particularly. Details of Papers/patents: Brief Description of working environment, expectations from the company: The working environment of the Firm is very nice, all of the Employees are very helpful and ready to tell any kind of doubt. Basically, no need to have previous knowledge of anything in finance, if you don't know even P&L they will tell but you need to perform it with full integrity and collaboration. Academic courses relevant to the project: Financial Accounting Drivatives and Risk Management Operations, Pune Student	2019- 20- sem1
UBS Business Solutions (India) Private Limited - Group	I was part of a new team called data management office. It was their first team in India. I had to undergo full fledged trainings and was given responsibility of few processes. I was under the Data lineage maintenance team. Other than this, I was given the responsibility to automate our team's maintenance processes. We were two interns in the team and out of the 9 processes, we automated 5 of them and made their job very easy. Tool used (Development tools - H/w, S/w): Tableau, microstrategy, Advanced excel, VBA, Collibra Objectives of the project: Data lineage maintenance and process improvement using automation Major Learning Outcomes: I've learnt a lot of things like how to communicate with senior high ranked employees, change management, setting up a new team, process improvement using Excel VBA, structuring the workflow, being a team player. Details of Papers/patents: Brief Description of working environment, expectations from the company: Our company considered us as high skilled interns, they trained us just like any other employee, and treated us highly. My team mates were the best. They helped me a lot and taught me new things. It was pleasure to join this new team and learn a lot from it. My manager always gave me higher responsibilities and considered me as a senior resource. Academic courses relevant to the project: Nil.	2019- 20- sem1

Company	Experience	Year
UBS Business Solutions (India) Private Limited - Group	Work Done 2.1-Daily Process Reconciliation of data (Entity- 3040, B999, B667, C205, C840, D604). In this we check that is any drop records from Input system (Gear-Ledger) to Merival Report. It done daily so that we can rectify it before the month -end and change the incorrect attributes (reason for drop records) so that the data should flow to particular account with correct attributes. Main Reason for Drop Records1-Inactive/ Incorrect Group Trading Partner 2- Incorrect Cost Centre 3- Incorrect Function ID 4- Inactive Account 5-Industry & Customer Type Code. Daily FX Deal When the transaction currency is different from local currency, then there is a FX open position created which can bring FX gain/loss on the transaction. To avoid this, we offset the open position by making the reversal entry, so that at the end of the month there is no open position in FX trading. 2.2-Monthly Process 3-way reconciliation – this has to done on U+0 data and before the sign-off the entity. Reconciliation of data- Gear Vs Merival Vs MCR. Calculation of bond & swap value in the local Currency of Subsidiary Curacao. Calculation of guarantee fees & Collateral for UBS Hypotheken AG. UBS Hypotheken AG has taken the guarantee for bond issued by the UBS IB London. GGAT Adjustment- Through this we can make adjustment in the merival report to avoid the drop records and hard validation. Attribute check - Through this project we have to check the attributes for which GGATs aren't posted and post the comments for the same. Tool used (Development tools - H/w, S/w): Excel Objectives of the project: To do accounting of the Monthly process for different ledger, Swaps and Bonds Major Learning Outcomes: Through this internship, I have acquired advance knowledge of accounting. This internship has enhanced my skills in accounting, MS-Excel to do analysis on financial data. Details of Papers/patents: Brief Description of working environment, expectations from the company: UBS Pune has provided me with a great understanding of the working of corporate	2019- 20- sem1
UBS Business Solutions (India) Private Limited - RAS	I was alloted the Group Finance Division and the Hard Revenue Transfer Team. The major work was calculting the Hard & Soft Revenue/Cost transfers according to the Service Line Agreements b/w inter Group UBS entities. The work was mostly process oriented. Tool used (Development tools - H/w, S/w): In house softwares were used majorly FS-Per, one needs to have a good grip on MS-Excel Objectives of the project: To Calculate the Hard Cost Transfers b/w specific UBS entities for the intership period. i.e. The calculations were done on monthly basis. Major Learning Outcomes: 1) Advance working proficiency in MS-Excel 2) Knowledge of how the Transfer Pricing is applied in corporates. 3) Knowledge of how payment transfers are done within the entities & the complexity of transfers so as to make it difficult for external entities Details of Papers/patents: None Brief Description of working environment, expectations from the company: The working environment was good, the team members were really helpful and considerate. The Manager was very good. This is a support center. Academic courses relevant to the project: Fundamentals of Accounting & Finance FINANCE, Pune Student	2019- 20- sem1
UBS Business Solutions (India) Private Limited - RAS	Work mainly consisted of preparing daily and weekly revenue reports for different offices in London along with some adhoc analysis work. The processes are of two types which "Run the Bank" and "Change the Bank", interns are not made a part of the CTB process or the more fancy/better work. Tool used (Development tools - H/w, S/w): MS Excel, MicroStrategy (beginner level) Objectives of the project: Major Learning Outcomes: Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is good, people are helpful and cooperative. Academic courses relevant to the project: Fundamental of Finance & Accounting. Student	2019- 20- sem1
UBS BUSINESS SOLUTIONS Mumbai	My work in UBS was automation. I automated many manual processes of the bank. There are many departments in UBS. My department was Credit Risk Data Integrity. I enjoyed my work as I got to learn how one can use VBA, Html and JavaScript for the purpose of automation. The people here were very friendly and supportive. Tool used (Development tools - H/w, S/w): VBA, HTML, JavaScript, my sql Objectives of the project: Since my work involved automating manual processes, the main objective was to reduce overall time and cost. Major Learning Outcomes: I automated various processes. I learnt web scraping with the help of visual basic, HTML and JavaScript. Brief Description of working environment, expectations from the company: The working environment is good. The people are friendly and supportive. Academic courses relevant to the project: A little knowledge of SAPM and FRAM is sufficient. Student Name: Vishal Lavania	2018- 19- sem1
Udaan , Bangalore	Increased productivity of the field sales executive (FOS) by adoption of FOS app on a team of 189 members. Tool used (Development tools - H/w, S/w): Excel, SQL Objectives of the project: To increase productivity of field sales executive Major Learning Outcomes: Communication skills, data interpretation Details of Papers/patents: Brief Description of working environment, expectations from the company: The culture in Udaan is really flexible and at the same time professional. However, it is very much dependent on the category and the team you're assigned. Academic courses relevant to the project: Maths II	2019- 20- sem1

Company	Experience	Year
Udaan , Bangalore	The work involved managing PnL of a 20 Cr per month category in Udaan. Apart from this, we had to design monthly plans to give GMV targets to the sales team. Tool used (Development tools - H/w, S/w): SQL, Python, Advanced Excel Objectives of the project: PnL, Pricing strategy, Dashboarding Major Learning Outcomes: SQL, Python, Advanced Excel Details of Papers/patents: Brief Description of working environment, expectations from the company: Udaan has a great work culture, my team never treated me as an intern, My suggestions were given a lot weightage. Academic courses relevant to the project: Principles of Economics	2019- 20- sem1
Udaan , Bangalore	Buyer behaviour Analysis and modelling. Run targeted campaigns on selected Dormant Buyers to get them back on the platform. Tool used (Development tools - H/w, S/w): Python, SQL, Excel, Sprinkle Objectives of the project: To increase the Repeat rate and sales. Major Learning Outcomes: Python, SQL, Excel, Business Analysis. Details of Papers/patents: NA Brief Description of working environment, expectations from the company: The working environment is relaxed but professional behavior is expected. You get to travel(Bussiness Trips) a lot. Academic courses relevant to the project: NA.	2019- 20- sem1
Udaan , Bangalore	-Increasing touch base of FOS(salesman) for collection -Reducing cash default behavior in collection - Reducing TAT for cash payment update in buyers account -Reducing TAT for customer issue resolution Tool used (Development tools - H/w, S/w): Excel and My SQL Objectives of the project: To increase the collection on credit buying Major Learning Outcomes: market understanding, data analysis and interpretation, end user perspective on business Details of Papers/patents: Brief Description of working environment, expectations from the company: Working environment is good if one is dedicated to his/her work, since its a startup there is no proper intern program, one has to ask for work to show others his/her potential Academic courses relevant to the project: Technical report writing	2019- 20- sem1
Udaan , Bangalore	Data Analytics, Business Development Tool used (Development tools - H/w, S/w): MS Excel, SQL Objectives of the project: Market Developmet Major Learning Outcomes: Corporate Culture, Functional Hierarchies, Market Dynamics, Data Analytics Details of Papers/patents: Brief Description of working environment, expectations from the company: Helpful mentors and managers who are very easy to approach. The work being done affects the day to day working of the company. Useful feedback received and improvements done. Academic courses relevant to the project: Supply Chain Management	2019- 20- sem1
Udaan , Bangalore	1. Market research: Surveyed 15pincodes of Delhi on foot to size the market of fresh fruits and vegetables. Descriptive statistical analysis and inputs were given to demand generation team regarding each area 2. Business analysis: worked on multiple projects required to scale operations of category in New Delhi Tool used (Development tools - H/w, S/w): Python Objectives of the project: 1. Complete market sizing of fruits and vegetables in Delhi Major Learning Outcomes: 1. Persistentance and resilience are key factors in determining your work output at a high pace startup like Udaan Details of Papers/patents: Nine Brief Description of working environment, expectations from the company: 1. Work alloted may seem trivial, but will be integral to company's business 2. Mentors will be very busy with their own work but will still manage to give you atleast an hour a week 3. The startup environment is high paced as aforementioned-this requires one to be available at all times with flexible working hours Academic courses relevant to the project: Principles of economics, management, statistics related courses Student	2019- 20- sem1

Experience Year Company I was allotted the Fresh team in Udaan. My role was in both the supply and the demand team. I was supposed to coordinate between the two for efficient completion of my main project. I was responsible for giving them key market insights to drive sales in the entire Delhi region allotted to me. I was also allotted side projects in the supply team in both teams. The main project was to do the market sizing for the F&V industry in Delhi. It was to gauge the potential reach of Udaan Fresh and suggest initiatives to get into the serving the extremely widespread F&V industry in Delhi NCR. It was important to understand how much potential each pincode had along with understanding what kind of SKU would be ideal for each pincode. We used Statistical tools to get an unbiased view of the same. Apart from this, we did various side projects and got an overview into the entire process behind the supply side and demand side of this vertical and were able to learn various technical and soft skills to help us in our professional career post college. Tool used (Development tools - H/w, S/w): SQL, Python, Excel Objectives of the project: An estimation of Purchasing Power of F&V category among various divisions of Delhi buyers was to be done, considering the following factors: - 1. Pincode wise variations 2. SKU wise distinctions 3. Shop type categorization Major Learning Outcomes: Market Sizing, Statistical Data Analytics, Fundamentals of this very different field of 2019-Udaan , Delhi F&V, Mandi dynamics, Regression Tools, SQL and Python, Biz Dev measures, Supply Chain Management 20-Details of Papers/patents: None Brief Description of working environment, expectations from the sem1 company: The working environment of the company was just as one expects a start-up firm to have. As interns, however, the involvement in the day to day activities wasn't there and we weren't involved a lot in the team due to us having a separate project, which did not really affect the day to day functioning of the vertical. We had weekly meetings. The HR for the few of us in Delhi office was based in Bangalore only so it has operational challenges. But, since next semester onwards, Udaan Delhi is a separate PS station, this won't be a problem anymore. Not everybody had a separate project to be done. Those who were given projects in their team's day to day functioning enjoyed their stint. However, they did feel that the work was a bit monotonous. Overall, it was a good insight into the working of a B2B E-commerce company and helped one understand the nuances of this sector. The stipend, along with perks such as Ola Corporate would be considered a decent remuneration. Academic courses relevant to the project: Supply Chain Management, Business Communication Brief write-up on PS-II station: Udhyam: An NGO which is trying to build their technical team.Looking for students who are good in UI development,data analysis,visualization etc. Student Cybersecurity is an important concern for any organization. Two of the most common approaches to managing and monitoring network events are SIEM (security information and event management) and log management. These applications log, process and analyze data in order to give better insights into what's going on within a company's network and IT infrastructure. While SIEMs and log management tools are valuable in any company's security toolbox, they can also be a challenge to use effectively. My work entailed coupling a traditional SIEM and log management system with Behavioral Analytics to increase the efficacy of the system in risk mitigation. Tool used (Development tools - H/w, S/w): Hadoop database, Graylog, ElasticSearch, Recurrent Neural Networks Objectives of the project: To enable Information 2018-UltraTech (Ahura Centre), 19-Security team to quickly identify anomalous activities for timely incident response and to archive the Mumbai security events logs for forensic analysis. Major Learning Outcomes: Learned how to: Academic courses sem1 relevant to the project: Machine Learning, Artificial Intelligence, Recurrent Neural Networks, Behavioral Analytics Name: Vishal Lavania (2013B1A80774G) Tool used (Development tools - H/w, S/w): Python libraries, ElasticSearch, Graylog, VM Red Hat Enterprise Linux Servers Objectives of the project: To build a Security Event and Incident Management System with Artificial Intelligence using Recurrent Neural Network to raise security alerts mitigating business risk Major Learning Outcomes: Information Security, ELK stack, Graylog, NXlog, Python Academic courses relevant to the project: Artificial Intelligence, Machine Learning Name: Trupti Shet (2015A4PS404H) Predictive Analysis Tool used (Development tools - H/w, S/w): Python,PI Sdk Objectives of the project: Generating smart alerts for failure Prediction Major Learning Outcomes: Making of Regression Models 2018-UltraTech (Ahura Centre), using time series analysis Brief Description of working environment, expectations from the company: 19-Mumbai Working environment is quite strict and punctuality is important. Academic courses relevant to the project sem1 : Machine Learning, C programming Student Name: Srinivasan G (2015A4PS0283P)

Company	Experience	Year
United Airlines Business Services Pvt ltd	Started with extensive training in spotfire, Excel and SQL, with basic training in R, Python and Using teradata. After that was allotted to a small project where we can apply our knowledge from training. Worked on developing an artificial intelligence model for personalized destination recommender for employees. Presented it to stakeholders. Quality checked the data between data transferred to a newly created palintir database and current teradata database and reported the anomalies. Analysed the stability of the network planning prediction model by comparing the predicted vs actual data. This is an ongoing project, and will continue even after the PS ends. Tool used (Development tools - H/w, S/w): Spotfire, hive, SQL, R Objectives of the project: To build an artificial intelligence model for personalized destination recommendations for employees. To check the stability of future prediction model of the network planning team. Major Learning Outcomes: SQL, Data analytics, Hive, R, Spotfire, Communication skills. Brief Description of working environment, expectations from the company: Excellent, Professional atmosphere with lot of knowledge transfer sessions. People are extremely friendly and will help in every aspect possible. Can really expect to improve in professional behavior. Speaking to Stake holders from United States of America will improve our communication skills. Academic courses relevant to the project: Database Management Systems, Machine Learning Name: Soumya Sharma (2015A4PS0261G)	2018- 19- sem1
United Airlines Business Services Pvt ltd	Prepared data tables using Teradata and SQL to analyze these metrics and develop insights into volatile markets having low efficiency and productivity Performed exploratory data analysis using SQL & Spotfire and helped Revenue Management team to devise cost-cutting strategies and optimize market utilization. Created 2 dashboards for data visualization Performed linear regression modeling to understand metrics like load factor and market yield to forecast changes; Tool used (Development tools - H/w, S/w): R, SQL, Teradata, Spotfire, Excel, Palantir Objectives of the project: to build a dataset that could be used as a 'Fingerprint' for markets Major Learning Outcomes: data analysis, visualization, automation Academic courses relevant to the project: Principle of Economics, Any course related to the data analytics	2018- 19- sem1
UpGrad	My work is to prepare interview content on Data Structures and Algorithms for an online course on Software Development Engineering (Full Stack). Apart from that I redeveloped some previous modules in the course. Tool used (Development tools - H/w, S/w): IntelliJ IDE Objectives of the project: The objective is to prepare an online course on Software Development Engineering (Full Stack). Brief Description of working environment, expectations from the company: The work environment in my team is very friendly. My mentor is very supportive until and unless you completed the work which is allotted to you. No one questions you for anything. Flexible working hours is an added advantage for a city like Mumbai. I expect that the company can enroll the interns in one of their online course which can also be part of the evaluation and it helps the student to make this time even more productive by acquiring new skills. The company expects a sound knowledge of Data structures and algorithms and good at content writing. Academic courses relevant to the project: Object-oriented Programming, Data Structures and Algorithms Name: Nausheen Akhter (2015A7PS0023P)	2018- 19- sem1
UpGrad	The main task of my project was to design content for the course BLOCKCHAIN. For which I did some research and designed a core blockchain using JS. Then I created decentralized application by writing smart contract using Solidity. After it I developed a blockchain using Hyperledger Fabric. Tool used (Development tools - H/w, S/w): Nodejs, npm, virtual machine, docker, visual studio code, remix editor, metamask, Ethereum Wallet. Objectives of the project: Creating content for the course BLOCKCHAIN. Major Learning Outcomes: Learnt in depth about the new technology, blockchain. Academic courses relevant to the project: Computer network, cryptography, data structure and algorithm. Student Name: SINDHU DAVULURI (2015A8PS0509G)	2018- 19- sem1
UPGRAD , Mumbai	Created content for learners with aim to teach them, but not limited to, python, PCA, Exploratory data analysis, data visualization in python, Linear Regression, Logistic Regression etc Tool used (Development tools - H/w, S/w): Jupyter notebook Objectives of the project: To create content for learners Major Learning Outcomes: Got to learn basics of Data science and machine learning, concepts like Linear regression, logistic regression, PCA, EDA etc Details of Papers/patents: None Brief Description of working environment, expectations from the company: Most of the team members were seniors from BITS. Team communication and environment was very good. Academic courses relevant to the project: Computer Programming, Mathematics 2, Mathematics 1, DSA, Intro to Data science, Machine Learning	2019- 20- sem1

Company	Experience	Year
UPGRAD , Mumbai	The project was related to the content development for the Blockchain technology. I was part of the team that was working on the development of the content for the Hyperledger Fabric, a blockchain technology for the enterprise. Tool used (Development tools - H/w, S/w): Hyperledger Fabric Binaries, Docker, Fabric SDK for Node.js Objectives of the project: Content creation for the Blockchain Program. Major Learning Outcomes: Got to learn about the Blockchain technology for the enterprise, Hyperledger Fabric. Learnt how to create Node applications to interact with the chaincode. Learnt to send HTTP requests using Postman application. Details of Papers/patents: Brief Description of working environment, expectations from the company: Everyone is very supportive and ready to help you at any point of time you require it. The work culture is very good. You need to come before 11 in the morning and can leave at any time depending on the work for that particular day. Sometimes it can be as early as 4:30 or 5 in the evening and sometimes it can be even 9 or 10 in the night. One thing that stood out was that the people here are very helpful and are always there for you if you are stuck at some point. Academic courses relevant to the project: None which I had done.	2019- 20- sem1
UPGRAD , Mumbai	Content Strategist for College programs - SD (Software Development) program. To compile the learning analytics for the modules and modify or suggest changes in the already the existing modules if required. Tool used (Development tools - H/w, S/w): upGrad Platform, InterviewBit, etc. Objectives of the project: Content development and monitoring Major Learning Outcomes: Learn about Full Stack development and its various frontend and backend technologies Details of Papers/patents: - Brief Description of working environment, expectations from the company: Colleagues are wonderful, major force towards self learning, work can be redundant sometimes but overall a great experience. Academic courses relevant to the project: OOPs, DSA, POM etc. Student	2019- 20- sem1
UST GLOBAL	Web Development Tool used (Development tools - H/w, S/w): Node js Objectives of the project: Website launch Major Learning Outcomes: Web development Brief Description of working environment, expectations from the company: Good Name: Harika Kothapalli (2015A3PS0364H)	2018- 19- sem1
UST GLOBAL	This project deals with the deployment of various JavaScript API's which are programmed to task the different use cases of the Ethereum Blockchain. API's have been developed for 3 such use cases. The first use case includes the Proof of Existence which is an API designed to prove the existence of a document or a string in a private blockchain so as to prove the rightful ownership of the document based on a timestamp and block number. The second use case deals with the telecom industry by preventing the usage of stolen phones by making sure they cannot register to mobile network providers. The third use case can be used to solve the common fraud found in the finance industry which involves invoice financing. Various technologies and databases have been used which are listed below. Tool used (Development tools - H/w, S/w): Docker, MongoDB, Ethereum, MySQL, Truffle, Ganache, Android Studio, Expo Objectives of the project: Proving the existence of data at a certain point in time can be very useful for educators, entrepreneurs, and attorneys. Timestamping data in an unalterable state while maintaining confidentiality is perfect for legal applications. The Proof of Existence project is based on the concept about proving the ownership of a certain document/file/media which was created on a date and time. The Proof of Existence API allows the users to store the hash of data securely within the Ethereum Blockchain so that in future no claims can be raised regarding the ownership of the data. The second API is the Prevention of theft.The Prevention of Theft platform aims at bringing all Telecom Companies and other authorities such as Police Department into a consortium, so that the IMEI blacklist can be shared among them. This means that an IMEI number blocked by one member of the consortium will be considered blocked by every other parties under the network. This is implemented using Blockchain Technology (Ethereum Platform) using the concept of 'Proof of Existence'. This API aims at preventing the usage of stolen phone	2018- 19- sem1
UST GLOBAL	Software Development, Marketing Research Tool used (Development tools - H/w, S/w): Pycharm,Python, Excel, Powerpoint Objectives of the project: Develop application, Find the market and competitors of softwares Major Learning Outcomes: Development using python. Brief Description of working environment, expectations from the company: Good learning environment. Got enough help from project leaders. Name: Archa R I (2014BA80900G)	2018- 19- sem1

Company	Experience	Year
UST GLOBAL	Hands on experience on making a humanoid robot for a textile firm Tool used (Development tools - H/w, S/w): Open CV software, OpenGL library Objectives of the project: To make a humanoid robot for a textile firm which could preview the product on the customer without him actually wearing it. Major Learning Outcomes: Experience in OpenCv, OpenGl libraries. Brief Description of working environment, expectations from the company: Working environment is cordial and stress free compared to usual IT firms. Employees are friendly and supportive. Most of them give us ideas to proceed with the project from their experience. Academic courses relevant to the project: Computer Programming Name: Vamsee Krishna Padala (2015A4PS0349G)	2018 19- sem1
UST GLOBAL	My work was to build a data streaming and analytics platform for Trade Funds related affairs. The platform was based on Apache Kafka and Elk Stack. The main use of the Framework is analysis of the data coming from point of sales machines across retail stores and thus aid in decision making regarding offers made by manufacturers. Other use cases include Shelf Performance Analysis and New Item Setup. Tool used (Development tools - H/w, S/w): S/w-Apache Kafka, ELK Stack, Java and Python Programming (Basic) Objectives of the project: To build a data streaming and analytics platform for Trade Funds related affairs Major Learning Outcomes: An introduction to Big Data analytics, Got to work on latest industry relevant software. Brief Description of working environment, expectations from the company: It was a pleasure working under Mr. Ashok Nair who was my mentor for the project. He always encouraged us to come upp with innnoviate solutions whenever he presented us with an idea. All of my colleagues were cooperative and understanding. Overall, the company provided us with a relaxed and productive environment. Academic courses relevant to the project: Computer Programming, Object Oriented Programming Name: Sindhu Davuluri (2015 A8PS0509G)	2018 19- sem1
UST GLOBAL	Web Development and UI/UX Tool used (Development tools - H/w, S/w): programming IDE's like atom, C++ Visual Studio Objectives of the project: Web Application Launch Major Learning Outcomes: Web Development Brief Description of working environment, expectations from the company: non-flexible office hours and hierarchy Name: Nihal Reddy Barla (2014B1A80792H)	2018 19- sem1
UST GLOBAL	We created usecases of blockchain. We used solidity to write smart contracts on Ethereum Blockchain. We also wrote API'S and dockerized the software in container. We used ec2 instance to host it. Tool used (Development tools - H/w, S/w): JavaScript, nodeJS, solidity,docker,AWS,ReactJS,HTML,CSS Objectives of the project: To create different use cases of blockchain (Prevention of Theft, Proof of Existence) using its properties of immutability and decentralization. Major Learning Outcomes: I have learnt JavaScript, nodeJS, solidity,docker,AWS to do the given projects. I worked exclusively working in backend field. I learned different types of computer and networking architecture when using IPFS and ethereum to upload our files into a decentralized network. Brief Description of working environment, expectations from the company: The working environment was great. Mentors were supportive and they expect a lot of passion,enthusiasm and hard work from bitsians. We do some real time projects, working alongside the UST employees. They have great expectations from us. The employees were cooperative. It is good PS for an internship. Academic courses relevant to the project: Cryptography Name: Anshul kumar (20150443) Tool used (Development tools - H/w, S/w): Python Objectives of the project: Making a trust platform that would provide more data security and returns only safe answers. Major Learning Outcomes: Python Brief Description of working environment, expectations from the company: The work load in this ps station is not much. If you want to study someother course (say datascience or finance) on udemy or other website then this is the perfect ps. There will be less work load and you will get atleast 1-2 hrs daily for studying. City is cheap so 20k stipend is decent. Name: Shalvak Mittal (2014B3AA0723H)	2018 19- sem <sup>-</sup>
UST GLOBAL	I was a part of number of projects. At first, almost everyone has get familiar with HTML, Javascript and the basics of web development. I was a part of the backend team. My work initially was with GET, POST requests using POSTMAN. Since it is a R&D department, a lot of new technologies like Blockchain, Hashgraph are being researched and experimented on. They encourage the learning of new programming languages also like golang. Tool used (Development tools - H/w, S/w): Languages - HTML, Javascript, Java, PHP Objectives of the project: Web Development Major Learning Outcomes: New programming languages learnt. Brief Description of working environment, expectations from the company: The working environment is quite laid back. The managers are not really bothered if you finish your work on time or not. You can learn a lot in the 5 months if you have the determination. Academic courses relevant to the project: OOP, Operating System	2018 19- sem1

Company	Experience	Year
UST Global - Cochin , Cochin	Front-end Development and Debugging in JavaScript. Used ReactJS and Readux. Also worked in HTML,CSS libraries for styling. Tool used (Development tools - H/w, S/w): Visual Studio Code Objectives of the project: Front-end Development and Debugging in JavaScript for a Business Financial Service Website Major Learning Outcomes: Front-end Development work first-hand experience Details of Papers/patents: Brief Description of working environment, expectations from the company: working environment:-really good and flexible.Not hectic. Academic courses relevant to the project: OOP, DSA Student	2019- 20- sem1
UST Global Infinity Labs- Robotics , Thiruvananthapuram	In the first project I had to build a web app with microservices framework using python. The second project was realtime big data analytics over a supermarket chain's Point of Sale data. Tool used (Development tools - H/w, S/w): Python, Javascript, MySQL, Cassandra Objectives of the project: Geting an understanding of microservices their scaling. Major Learning Outcomes: Microservices, APIs, RDBMS, NoSQL Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment at infinity labs is decent, mentors will help you out if you have any issues. They provide restricted internet which might block some of the sites. They are strict about timings (arrival and departure). Academic courses relevant to the project: ML	2019- 20- sem1
UST Global Infinity Labs- Robotics , Thiruvananthapuram	I completed a total of 4 projects. The first 2 projects dealt with Web Development using React.js. I designed, integrated, tested and documented a Speechmatics based Dashboard as well as a Questionnaire generator based Website. In the third project, I developed a Desktop Application and packaged it for Linux, macOS, and Windows The fourth project dealt with developing a Flask based App and deploying it using Knative to a single node Kubernetes Cluster within a cloud platform Tool used (Development tools - H/w, S/w): Frameworks Used: JEST, Enzyme, PyTest, Sphinx, Electron and some company specific tools for their Cloud Platform Objectives of the project: To gain a sound knowledge as well as hands on experience of Web Development, Desktop App Development, Serverless Computing and Cloud Computing Major Learning Outcomes: 1) Serverless App Development 2) App Deployment using Kubernetes and Knative 3) Web Development using React.js 4) Desktop App Development using Electron 5) AWS ECR, AWS Lambda, Docker Details of Papers/patents: Brief Description of working environment, expectations from the company: The work environment is professional as well as peaceful. Mentors are very helpful and the projects are very useful for future endeavors. Academic courses relevant to the project: C, OS, OOP Student	2019- 20- sem1
UST Global- Chennai , Chennai	1.We have created a model which is trained and tested using machine learning and its functions. User Interface also is created to ease the understanding of the working processes of the machine learning in this project and the use case. 2. We have used the node-red tool which is used to connect the internet of things on one platform and which makes things easier. We used this tool in creating a solution for maintaining of clean room conditions through monitoring the connections made and the results obtained in the node-red tool and applying the conditions we need of the results have a problem. Tool used (Development tools - H/w, S/w): Html,css, node red,jupyter notebook Objectives of the project: To create a user interface to make it easier for the user to get the results without having to understand the back end. And to maintain clean room conditions for an assembly line through monitoring. Major Learning Outcomes: Have learnt how create user interface using HTML and also understood how a tool named node-red makes it easier to connect internet of things and how a company on a whole works when there is an order from the client. Details of Papers/patents: Brief Description of working environment, expectations from the company: It was really good. We had the freedom to get to know properly about the project and then helping the company in what we can. They even pushed our limits in understanding the processes. Academic courses relevant to the project: Machine learning, Neural networking and fuzzy logic	2019- 20- sem1
UST Global- Chennai , Chennai	Machine Learning in Python, Web development, Serverless Cloud Computing in AWS Lambda. Tool used (Development tools - H/w, S/w): Jupyter Notebook in Python, Eclipse IDE in Java, JavaScript, CSS, HTML, AWS. Objectives of the project: Project1: To predict the best seller for a product using machine learning. Project 2: To create the backend for a mobile app using JSON. Major Learning Outcomes: Learnt a lot about Machine learning and Serverless Computing. Details of Papers/patents: Brief Description of working environment, expectations from the company: It was a very good work experience which introduced the IT industry to me. Academic courses relevant to the project: Machine Learning. Object Oriented Programming. Student	2019- 20- sem1

Company	Experience	Year
UST Global- Trivandrum , Trivandrum	Developing an analytical tool which identifies the critical jobs (ETL scripts) of Masters Sequencer(Its is basically a acyclic Directed graph with nodes as it's jobs) based on the past Runtime of its Jobs .This tool helps in identifying its jobs which can be tuned to reduce the Runtime of Master Sequences. Tool used (Development tools - H/w, S/w): Phython Pandas Matplotlib tkinter Objectives of the project: Find the Critical Path of Master Sequencers Major Learning Outcomes: Data Analytics ,Graph Data Structure, Critical Path Algorithms, App Development using tkinter. Details of Papers/patents: Brief Description of working environment, expectations from the company: If you are working on Client side (like me) then most of the people are non technical or they don't know much about coding. You will get enough time for coding if you planning to study DSA in PS as work pressure is not that much. Stipend is bit low but sufficient for Trivandrum as it is cheaper than other places. Academic courses relevant to the project: OOP ,DSA and basic statistics	2019- 20- sem1
UST Global- Trivandrum , Trivandrum	We were allotted mentor and project in a UK based client account- Equifax. We worked on an "AI Powered Test Case Selection". The idea and algorithm design was a innovative achievement, and we made a web application ahead. The application was presented in an international annual hackathon and secured a position in Top 3 teams (Out of 445 teams across all USTs) Its a great PS for people willing to learn from scratch and grow in software development. Tool used (Development tools - H/w, S/w): Springboot, MongoDB, AngularJS, Docker, Jenkins, Junit, Jacoco, Cucumber, Istanbul Objectives of the project: Reduce the testing time for any Project application. Major Learning Outcomes: Agile methodologies of a development team. Front end Development. Back end Development. Developing AI from scratch without using libraries. Client library. Deployment and Dockerisation. Details of Papers/patents: Application for a Patent through UST Attorney's Filed. Brief Description of working environment, expectations from the company: The working environment was really good. There weren't any issues in our account for timings and all. The mentor and other senior were really experienced in the field and helped a lot in our learning and work. Academic courses relevant to the project: Artificial Intelligence, Machine learning, Neural networks, Object Oriented Programming, Operating System, Database management system Student	2019- 20- sem1
UST Global, Chennai	Machine Learning Project in the area of computer vision. Given input of photos of a crashed car, detect the different damaged parts and the extent of the damages. Object Detection and Classification libraries were utilized. Tool used (Development tools - H/w, S/w): Python(Anaconda, Spyder), Tensorflow API, Keras Library, Mask_RCNN repo for Object Detection, VGG-16 Neural network for classification. Objectives of the project: Create a PoC tool for detecting Damages to Car's exterior from Photos Major Learning Outcomes: Mastery of image based Machine Learning, using Neural Networks. Brief Description of working environment, expectations from the company: UST Chennai does not give PPOs. No LORs either, for sure. Company has no value for BITS students. Most of us were made to do projects that were not well thought-through and there is no technical help from anyone. Learning outcomes were limited because of lack of support. They still expect all deadlines to be met by us, figuring everything out on our own. The only positive thing is that you can be sure of getting a project and doing some work; also, company generally allots projects suited to your area of experience (as per submitted CV). I was happy to work on Machine Learning. Academic courses relevant to the project: Neural Networks and Fuzzy Logic Name: Akash Goyal (2015A2PS0811P)	2018- 19- sem1
UST Global, Chennai	The first project was aimed at building a web application using Spring Framework and JAVA as the coding language, MySQL was used to maintain the database and the second project was aimed at building chat bots using the company tool ICE-XD and one using Amazon Developer Account which was integrated with Amazon Alexa to build a voice chat bot. Tool used (Development tools - H/w, S/w): Spring Boot, MySQL, ICE-XD, Amazon Developer Account, Amazon Web Services Objectives of the project: To build web application and Chat Bot Major Learning Outcomes: The learning about the Spring framework was the highlight as that will help anyone to build any kind of application web or mobile. Brief Description of working environment, expectations from the company: The work environment was good overall and the company is very active in cultural and sports activities. People here are very friendly and the experience is very good. Academic courses relevant to the project: Object Oriented Programming	2018- 19- sem1

Company	Experience	Year
UST Global, Infiniy Labs, Trivandrum	Worked in two areas, machine learning and blockchain. Developed a chat bot as a part of the machine learning project and a blockchain based electronic health record management system. Tools used (Development tools - H/w, S/w): Microsoft LUIS, Ethereum, Solidity, Nodejs Objectives of the project: Developing an electronic health record management system which offers privacy, security and integrity to the records/data involved in the system by leveraging blockchain capabilities Outcomes of the project: Developed a minimum viable product(MVP) which stands as a proof of concept that such a blockchain based electronic health record management system is a better option. Major Learning Outcomes: Learned about new technologies like blockchain along with a couple of languages and frameworks including LUIS for NLP and conversational AI. Brief Description of working environment, expectations from the company: The ecosystem was very friendly and offers a lot of freedom in choosing the projects and the way we approach the same. Academic courses relevant to the project: Neural Networks and Fuzzy Logic	2017- 18- sem1
UST Global, Infiniy Labs, Trivandrum	I worked on 3 projects during the internship. The first one, Digital Assistant is about developing a chatbot that can converse with clients of the company. Initially our team has developed it using Microsoft services and later we worked on a neural network model that could help chatbot in giving appropriate responses. The second one, Script Analyzer is a java based web application that helps to analyse and visualize SQL queries in shell script files. The last one, is EHR Blockchain which deals with implementing blockchain to healthcare sector. Tools used (Development tools - H/w, S/w): Microsoft Bot Framework, Microsoft Cognitive Services, Python, Word2Vec    Eclipse, Java, Webgraphviz    Ethereum, Web3JS Objectives of the project: Script Analyzer - To develop a java based web application that helps to analyse and visualize SQL queries in shell script files. Outcomes of the project: Script Analyzer - A stable version of the project has been developed. Major Learning Outcomes: Machine Learning, NLP, Python    Java Web Application Development    Blockchain, Ethereum Brief Description of working environment, expectations from the company: Infinity Labs is the innovation division of UST Global. Mostly Interns would be working in the lab. Majority of the projects deal with emerging technology trends like ML, NLP, Blockchain, AR/VR, IOT etc. The interns should be familiar with these topics, because there's no technical training as such. You will also get to participate in a lot of events organized by the company. As of now, the available facilities compared to the number of interns is less. Also, there is an opportunity for PPOs too. Academic courses relevant to the project: Machine Learning, OOP, DBMS etc.	2017- 18- sem1
UST Global, Infiniy Labs, Trivandrum	Was wrking on computer vision part for self driving car Tools used (Development tools - H/w, S/w): Yolo, open cv, darknet, Anaconda Objectives of the project: designing the accurate model for self driving car Outcomes of the project: made a model who can detact all trafic signal Major Learning Outcomes: learned a lot about different technologies Brief Description of working environment, expectations from the company: Working environment is good and we are allowed to choose how we want to approach in the project complete freedom is given and rest all are good. Academic courses relevant to the project: Java, python, Machine Learning.	2017- 18- sem1
UST Global, Infiniy Labs, Trivandrum	1. Robotic Process Automation project 2. Autobots project 3. Research project on digitization of mining industry 4. Application development using c# and .NET Tools used (Development tools - H/w, S/w): Uipath studio, Django, python, c#, Java, .NET Objectives of the project: Automation of timesheet filling process for RPA Project, building forms using Django, research work on digitization of mining industry, application development for automation of timesheet filling Outcomes of the project: Application development using c# is in progress, rest projects are finished Major Learning Outcomes: Learned new programming languages and worked directly for clients, gaining exposure with the workings of the industry Brief Description of working environment, expectations from the company: It's good enough. Academic courses relevant to the projects I didn't do any course in BITS which was relevant to the projects I did here.	2017- 18- sem1
UST Global, Infiniy Labs, Trivandrum	Developed an android application for Kerala police Tools used (Development tools - H/w, S/w): Android studio Objectives of the project: Create an android app Outcomes of the project: Android App Major Learning Outcomes: Learned Android Studio Brief Description of working environment, expectations from the company: Company does not expect anything more than basic, work environment is flexible. Academic courses relevant to the project: Computer Programming.	2017- 18- sem1

Experience Year Company Reviewed use cases and research papers on automated algorithmic trading. Learnt various stages of software development .Gained knowledge about Artificial neural networks (ANNs) and NLP(Natural Language Processing) to understand the software design completely. Conducted extensive research on exchange policies, rules and regulations of CME-NYMEX exchange. Learnt, practiced and analysed online simulated and real trading for WTI crude oil futures. Analysed existing trading softwares in the market. Gained knowledge about how a database is designed. Researched and analysed various Quantitative and Qualitative parameters like OHLC (Open, High, Low, Close), demand, supply, production, Geopolitical factors etc. affecting crude oil prices. Conducted extensive research on major crude oil futures historical and real time Data vendors like CQG, Dxfeed, Kinetick, Tradingview etc. and their policies. Carried out data purchase process and availed discount of 20%. Analysed various blogsites ,news websites likes Oilprice.com, Bloomberg etc. for the qualitative data. Tools used (Development tools - H/w, S/w): My contribution was finance and trading domain expertise. Objectives of the project: Software will be fully automated, algorithmic, unsupervised and will take into account both quantitative and qualitative data for the Crude oil futures and take the trading decision on its own. It will be able to provide non-negative 2017-UST Global, Infiniy Labs, return on investment with 100% assurity .Software design will require the use of predictive modelling, 18-Trivandrum Natural Language Processing (NLP), Artificial Neural Networks (ANNs). ANNs will be trained and backsem1 tested with Historical trade data .For NLP part, Natural language classifiers are availble in the market.Data formats and data interval will be critical in designing the effective software. A team of around 30 people is assigned for different tasks of the project. Outcomes of the project: Automated trading software for Crude Oil futures derivative with Nonnegative return with almost 100% assurity. Major Learning Outcomes: Learnt Simulated and Real trading on NYMEX exchange. Gained knowledge about Natural Language Processing (NLP), Artificial Neural Networks (ANNs) and Database design. Understood policies of exchange and trading data vendors. Learnt about various Software development stages . Brief Description of working environment, expectations from the company: Everyone is supportive, encouraging. We easily got the permission for late night work in the office.In UST Global ,one can learn a lot of technologies in 6 months. Learning resources like Pluralsight, coursera are provided. Academic courses relevant to the project: Economic -- Principles of Economics (POE), Micro-Macro economics, Finance -- Derivatives & Risk Management (DRM), Security Analysis&Portfolio management(SAPM), Financial engineering, Fundamentals of Finance (FUNDAFIN), Computer Science -AI, Machine Learning, DSA. Student We developed a testing framework with features such as file validation, database validation, web testing etc using python and robot framework, with continuous delivery using Jenkins and Jira. We also worked on completing a web application for an ROI calculator of various tools using java, jsp, html, css etc. Tool used 2018-UST Global, Kochi (Development tools - H/w, S/w): Pyhton, Robot Framework, Java, Eclipse, HTML, Jenkins, Jira Objectives of 19the project: To create a complete testing framework with CI/CD Major Learning Outcomes: Learned about sem1 creating an actual project, and learned Brief Description of working environment, expectations from the company: Friendly environment Academic courses relevant to the project: CPP, OOP I worked on the problem of traffic flow optimisation using quantum computing. Tool used (Development tools - H/w, S/w): python, qbsolv(python library by D-wave Systems), maps(to plot output of the vehicles' paths) Objectives of the project: To find the routes between a source and a destination, such that traffic is 2018minimised in each path, using quantum computing Major Learning Outcomes: I learnt about quantum UST Global, Trivandrum 19physics and quantum computing and its application in real life problems. Brief Description of working sem1 environment, expectations from the company: The working environment is very friendly with flexible office hours and I learnt and enjoyed a lot throughout my PS-2 project. Academic courses relevant to the project: C(for basic programming), Quantum Computing Name: Abhinav Taneja (2014A8PS0463G)

Experience Year Company We created 2 applications on blockchain (ethereum). One of them being Proof of existence use case. In this web service, a person could upload an idea/music/video/pdf or any file, it will be taken an uploaded in a decentralised way on IPFS and sha256 hash of it will be recorded immutably on ethereum smart contract with a timestamp to prove your ownership of intellectual property/land registries or similar contracts like bonds, insurance. The 2nd Project being the prevention of theft use case. We developed a decentralised databse of blacklisted numbers so that no carrier in any region of world (if in consensus) will provide service to that phone. Other project I took up single handedly was developing an Alexa enabled feedback Response app using amazon's services for building voive front-end and AWS lambda and DynamoDB. It was completed in 3 days and taught me how to take a boiler plate code and turn it into a useful app overnight. Also it taught me how to take design decisions. This was one of the most challenging tasks i completed which build my confidence. Tool used (Development tools - H/w, S/w): Blockchain Team: Ethereum [Solidity to code Smart contracts], NodeJs to write API's in backend, React Native (front-end), Docker (Containerisation), Linux, AWS to host/deploy (EC2 Ubuntu instance), Web3 Module, Infura service (Replaced Geth - local node), GitLab - for Version Control Alexa: Amazon developer console, AWS Lambda (NodeJs), AWS DynamoDB Objectives of the project: To leverage properties of blockchain like Immutabiltiy and Decentralised Nature Major Learning Outcomes: Mostly there are philosophical learnings to adapt to tech world rather than merely getting hands on with tech stack provided, as it's the major difference between a student and an employee. How to dive in completely new technology and create 2018deliverable out of it filtering just the necessary stuff to speed up the process, simultaneously spending UST Global, Trivandrum 19weekends to read for diving into depths to innovate. Brief Description of working environment, sem1 expectations from the company: This company has one of the best campuses (office) in country. The place (Trivandrum) is really peaceful which gives Bitsians the necessary reboot they need which is not possible in crowded and polluted cities where other IT hubs are formed like bangalore/hyderabad/Gurgaon etc. Coming to work culture, working in an MNC teaches us a lot of things which are were organised in an extremely efficient and interesting way. Mentors are one of the greatest teachers I've ever had to brought in a lot of ideas which I might not even have imagined. They listen to you and appreciate you. There's a lot of flexibility in terms of projects which you want to use. The best part is that they are using the latest technologies which I going to be greatly useful in our careers. This place hosts plenty of technical, cultural events to stimulate our creativity and impose liveliness in employees. This place is heaven for a nature lover who is a technology freak as well! Just to add to it: I got my job off-campus solely on the basis of projects done here, which saved my time from competing in on-campus placements and landing into different projects which I might not like. I got an opportunity as a blockchain developer at a decent pay. Academic courses relevant to the project: Cryptography (Only if you want to understand the research part), Object oriented Programming, Data Structures and Algorithms (minimally used), C programming Name: Saurabh Sharma (2014B4A40801G) Tool used (Development tools - H/w, S/w): Python, R, Apache Kafka, ELK Stack Objectives of the project: To create a real time data analytics architecture for a US retail chain Major Learning Outcomes: R, Python Academic courses relevant to the project: C Programming, OOP Student Name: ABHIN MR (2015A3PS0276G) Modified the website ROI\_Calculator to incorporate real time changes. Completed automation testing of website magento using NoSkript by creation of 185 test cases. Created a programme for the automation of a QR-Code reader from generation to reading of it in using a physical device. Tool used (Development tools 2018-**UST-GLOBAL COCHIN** - H/w, S/w): NoSkript,Eclipse,Java,Selenium. Objectives of the project: Automation of the complete flow 19of the website magento. Major Learning Outcomes: Learned Java and automation testing. Brief sem1 Description of working environment, expectations from the company: Working environment was very employee friendly. Academic courses relevant to the project: OOP Machine Learning Project(ALPR), DBMS Tool used (Development tools - H/w, S/w): OrientDB,MongoDB,Elastic search, Outsystems Objectives of the project: To make a working model of 2018-UST-GLOBAL, CHENNAI Automated License Plate Recognition and verifying the license plate with the existing database. 2. Making 19an app to maintain the log details of the user. Major Learning Outcomes: Database, REST API Name: VENIL sem1 REDDY (2015A4PS401P) Created a payment automation mechanism software, Worked on graph databases and mobile application development Tool used (Development tools - H/w, S/w): Mongodb, Outsystems, ALPR Objectives of the 2018project: To create a payment automation mechanism software Major Learning Outcomes: UST-GLOBAL, CHENNAI 19-Java, Outsystrmd Brief Description of working environment, expectations from the company: The working sem1 environment ws encouraging and projects were engaging but the manager had no knowledge of IT and that was an issue. Name: Vaibhav Goswami (2015A8PS0413G)

Company	Experience	Year
UST-GLOBAL, CHENNAI	Machine Learning project in the field of Image Analytics & Computer Vision. Our Supervisor gave us complete freedom to research about the new technologies to try out in the course of learning. We had an amazing feedback from others in UST-Chennai. The project was completed and was taken over by Trivandrum Center. Tool used (Development tools - H/w, S/w): Machine Learning, OpenCv, Convolutional Neural Networks, Image processing libraries like keras. Objectives of the project: To create a machine learning capability to automate Car Damage Detection and Estimation. Major Learning Outcomes: Proficient in Python & Mastery in Computer Vision and Image Analytics domain. Brief Description of working environment, expectations from the company: The organisation does not care about BITS students, if you compare this station with others, this station does not give any perks and incentives. Working environment is good, they just want the tasks to be completed with the allotted time. We were lucky to be allotted to this project, other students of this station were not given good projects and were not assigned any technical mentor. No PPO offered. Academic courses relevant to the project: Machine Learning, Neural Networks And Fuzzy Logic Student Name: ARJUN ANIL	2018- 19- sem1
Vasant Chemicals Pvt Ltd	Developed a uniflow process for MANCAT production Tool used (Development tools - H/w, S/w): ASPEN Objectives of the project: Streamlining an existing process Major Learning Outcomes: Proficiency in ASPEN Academic courses relevant to the project: Process Design Principles I and II	2018- 19- sem1
Viacom18 Media Pvt Ltd, Mumbai	Data Analytics, Business Intelligence, Product Testing & Development, Sales Pipeline Optimization Tool used (Development tools - H/w, S/w): R, JQL (JS), Mixpanel, VBA, Excel, BARC-BMW, Power BI, Lotame, Power-point. Objectives of the project: 1. Sales Process Efficiency through Automation and Reengineering, 2. Management of Voot Audiences through Data Enrichment Major Learning Outcomes: 1. The business dynamics of Media Industry. 2. Utilization of Data Analytics for Client Acquisition and Strategy Planning. 3. Excel/VBA (Advanced), R, JQL, Data Visualization Techniques Brief Description of working environment, expectations from the company: Ultra chill company culture, can't expect for a better PS station in terms of learning and chill balance. But NO PPO, as they only hire IIM/ISB grads. Academic courses relevant to the project: Probability & Statistics, Set Theory (Highly used) Name: Bhavya Gujral (2014B1A40860G)	2018- 19- sem1
Viacom18 Media Pvt Ltd, Mumbai	Generation of key performance indicator reports for the leadership team of viacom18 and automating this weekly MIS procedure using macros in excel reducing the human intervention to a bare minimum. Gained basic knowledge of the metrics used in the media industry to judge the success of a TV show or a channel and fundamental working knowledge of the media software like BARC and Mafras. Enhancing the usage of organization wide business intelligence dashboards for a quick and better analysis that can be done by all the business units of the entire company has helped in reducing the entire manual data extraction and analysis (multiple times) for individual analysis. The episode tagging code written has reduced the complexity of reading data as manual filtering of original and repeats has been omitted and the ratings for original programs is not affected by the lower ratings of the repeats thus helping in streamlining the data more and funneling to a better insight from the analysis. Tool used (Development tools - H/w, S/w):  Microsoft Excel, VBA, R programming, BMW (BARC Media Workstation), MAFRAS Audience report generator, Power BI Objectives of the project: To automate the weekly MIS process and generate meaningful BI dashboards Major Learning Outcomes: Automation using macros in Microsoft excel, Power BI tool dashboard creation, Analysis using R programming Brief Description of working environment, expectations from the company: The working environment is very organic in nature. There is no lock in period and working hours are also flexible. The company is a highly data driven media organization and the insights from the analysis done by the data science team are taken seriously by the business units of the company. In all, the work culture is pretty great enhance the productivity of the employees and at the same time isn't bothering with the work life balance. The policy of hiring in the company is such that they don't offer pre-placement offers and have a placement procedure that an intern has to follow to get	2018- 19- sem1
Viacom18 Media Pvt Ltd, Mumbai	Worked in the Corporate Strategy and Data Sciences Team. Utilized data week-on-week to predict the optimised ad break patterns for the coming week for Viacom18 portfolio TV channels viz. Colors Kannada PT and Colors NPT. Post-analysis of the performances of Sonic Nickelodeon episode scheduling project, Rishtey Cineplex movie scheduling project and Break-in-Break-out impact isolation on the pilot channels. Generated trends for Audience Retention, Program and Ad viewerships, Adherence of recommendations, Impact, Uplift, Market Share, among others for various projects of the team. Tool used (Development tools - H/w, S/w): Excel, R, VBA, BARC, Powerpoint Objectives of the project: To improve various viewership metrics for Viacom18 TV channels so to generate improved ad revenues in our TV vertical Major Learning Outcomes: Data analytics, how a media company functions Brief Description of working environment, expectations from the company: High ownership, encouraging work culture, supportive team	2018- 19- sem1

Company	Experience	Year
Viacom18 Media Pvt. Ltd - Corporate Strategy , Mumbai	Business Analytics and Business intelligence projects Tool used (Development tools - H/w, S/w): Ms Excel, BARC BMW Objectives of the project: Multiple short term projects in data analytics and business intelligence Major Learning Outcomes: Structured thinking, problem solving approach, organisational and corporate culture, professional code of conduct. Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: Wonderful environment with a team that works on high stakes and is also consists of very qualified individuals. Great learning experience. Academic courses relevant to the project: N/A Student	2019 <sup>-</sup> 20- sem1
VMware	Worked on the UI & Backend for SDDC-Manager and solved some bugs Tool used (Development tools - H/w, S/w): UI: Angular, Typescript. Backend: Java, Spring-Boot Objectives of the project: Software-Development Major Learning Outcomes: Working with angular & spring-boot Brief Description of working environment, expectations from the company: The environment is apt for work, the company is leader in cloud virtualisation you can expect a friendly environment, work may vary depending on the team you are assigned to (testing, backend, ui). The conversion rate is pretty good even if there is no opening in your team you will be given numerous opportunities to get mapped into other teams. Academic courses relevant to the project: OOPS, Principles Of Programming Language Name: Diwanji Vedant Milind (2015A7PS0107G)	2018 19- sem1
VMware	Worked on the development of SDDC Manager which is a proprietary of the VMware Cloud Foundation. Developed various pages as part of the UI team using the Angular Framework. Tool used (Development tools - H/w, S/w): Javascript, Spring boot, Angular Objectives of the project: Software Development Major Learning Outcomes: Spring Boot, Angular, Development Testing Brief Description of working environment, expectations from the company: Working environment is good. The people are very friendly and help solve your doubts. They also believe in having a healthy discussion in relation to developing designs. The company expects one to have a good programming background and willingness to learn as the products require a good amount of time to review. Academic courses relevant to the project: Object Oriented Programming, Computer Programming	2018 19- sem1
VMware Software India Pvt. Ltd. , Bangalore	Written code for the implementation of RAID 6 Erasure Coding. I was able to break the pages into 4 pages and then send them to the servers using RDMA. Then Parity data was calculated and was sent using RDMA. A server failure was simulated, and data was reconstructed successfully. VM was working without crashing, after the addition of the new code. Tool used (Development tools - H/w, S/w): Perforce, C Language, bash Objectives of the project: Distributed Remote Memory project aims to target SAP-HANA kind of workload by aggregating the memory from the different hosts in the cluster, thereby forming the memory pool in the cluster. Introducing data reliability into Distributed Remote Memory. Major Learning Outcomes: • Making changes to a kernel code of Virtual Machine • Learning about RDMA and Erasure Coding • Writing pure C code Details of Papers/patents: N/A Brief Description of working environment, expectations from the company: Work Environment is supportive, helpful and positive. Academic courses relevant to the project: Operating Systems, Computer Networks, Discrete Mathematical Structures Student	2019 20- sem1
VMware Software India Pvt. Ltd., Bangalore	The industrial experience in a prestigious and widely accredited company like VMware has enhanced my coding skills up to a great extent. It has taught me the actual application of coding in the real world, which has developed a strong understanding of the field. Also, there is a difference in coding for a normal lab question and for a company. For example, in a general question, one can simply name a variable as x, y, z, i, j, etc., but while coding for a company, every bit matters. It is required to give proper names to all the variables, so that a person who looks through it can perceive the purpose of usage. It is quite imperative to have proper indentation, proper spacing etc. Also, to account for the future needs, the designed code should be as simple as it can be. The kind simply and helpful mentorship here has helped me a lot to broaden knowledge base. I have learnt how to write RESTful APIs and also to debug any given code. Apart from Java, three other languages (HTML 5.0, Angular JS, and CSS) were also used in my project, which helped me to develop insights of the same. Writing generic functions, using JSON Object, or any other POJO, using Hash Maps, etc., which seemed to be a nightmare for me earlier, have now become quite an easy task to pursue. I used these throughout my project, and now I can use them anywhere without any hesitation. This PS experience will augment my future career prospects as it gave me such an excellent Industrial exposure. Hence, I am highly grateful that I got this opportunity to work with people of such high designation and quality at VMware.	2015 16- sem1

Company	Experience	Year
VMware Software India Pvt. Ltd., Bangalore	Added new features that help in seamless use of Citrix XenApp and XenDesktop products on VMware Identity Manager. Tools used (Development tools - H/w, S/w): Java, C#, JavaScript, JIRA, Confluence, Jenkins, Git, Reviewboard Objectives of the project: To integrate Citrix Remote Desktop Services - XenApp and XenDesktop with VMware Identity Manager Outcomes of the project: Added new features that help in seamless use of Citrix XenApp and XenDesktop products on VMware Identity Manager. Major Learning Outcomes: Cloud Computing, Software Development Methodologies, Parallel Computing Brief Description of working environment, expectations from the company: The industrial experience in VMware has enhanced my coding skills up to a great extent. It has improved my actual application of coding in the real world, which has developed a strong understanding of the field. Also, there is a difference in coding for a normal academic question and for a company. For example, in a general academic question, one can simply name a variable as i, j, k, a, b, etc but while coding for a company, every bit matters. It is required to give proper names to all the variables, so that when a peer who looks through it can understand the code seamlessly. It is also quite imperative to have proper indentation, proper spacing etc. Also, to account for the future needs, the designed code should be as simple as it can be. I have learnt how to write RESTful APIs and also to debug any given code. Apart from Java, two other languages (Angular JS, and C#) were also used in my project, which helped me to develop insights of the same. This PS experience will augment my future career prospects as it gave me such an excellent Industrial exposure. Hence, I am very grateful that I got this opportunity to work with people of such high quality at VMware. Academic courses relevant to the project: Object Oriented Programming, Parallel Computing, Cloud Computing, Data Structures and Algorithms	2017- 18- sem1
VMware Software India Pvt. Ltd., Bangalore	Worked on Design and Prototype of Remote Memory / Network RAM for vSphere (vCener and ESX hosts). Designed and implemented centralized memory manager and ESX infrastructure required to utilize remote memory service. Tools used (Development tools - H/w, S/w): C (vmkernel programming), C++ Objectives of the project: To implement a centralized memory manager that provides remote memory service for a cluster and ESX infrastructure to utilize this service. Outcomes of the project: Successfully designed and implemented centralized memory manager and ESX infrastructure from our side. Palo Alto team was working on a module which is later going to be integrated with our EX infrastructure for a complete working model. Major Learning Outcomes: Memory management, Object oriented programming, vmkernel programming, network programming Brief Description of working environment, expectations from the company: Work load was medium to hard. The transition to ESX and vmkernel side coding was challenging. Deadlines are reasonable. Academic courses relevant to the project: Operating Systems, Computer Networks, Object Oriented Programming	2017- 18- sem1
VMware Software India Pvt. Ltd., Bangalore	I was involved in the End User Computing of Vmware Inc, where the desktop is offered as a service(DaaS) to customers delivered through public clouds. My contribution was specifically involved towards automation of decommissioning customers which would later go on and integrated with the self service tool that the customer uses whenever he wants to move away from this offering by click of single button Tools used (Development tools - H/w, S/w): Ansible, Python, Powershell Objectives of the project: Automation of tenant teardown and CMS enablement Outcomes of the project: Implemented Automation scripts for the required Major Learning Outcomes: Computer Networking, Ansible, Cloud computing Brief Description of working environment, expectations from the company: VMware is such a fun place to work. There is so much importance given to work life balance and also on personal learning. The emphasis on core company values is paramount and it makes you feel to do more for the organization. Academic courses relevant to the project: Computer Networking Student	2017- 18- sem1
Walmart Global Technology Services , Bangalore	Technologies used: Spring Framework, REST services, Integrating REST calls to JAVA APIs, Datastax Cassandra, Apache SOLr, ElasticSearch Implementations: Using ElasticSearch along with JAVA APIs in order to get Responses from Users using Services and Products. Integrating Datastax Cassandra and Apache SOLr in order to make a database which allows it to do Text Based Queries which would allow instant Searches into the database. It would allow the user to search for anything that the user want to. Tools used (Development tools - H/w, S/w): H/w: Macbook Pro S/w: Spring Tools Suite, ElasticSearch, Kibana, Cassandra, SOLr Objectives of the project: -User Response Collection Outcomes of the project: Analysis of the Data for Enhancements Major Learning Outcomes: Good Code Writing, Database Usage, REST services Brief Description of working environment, expectations from the company:Working Environment is very friendly. PPO process is very bad and unpredictable.	2016- 17- sem1

Company	Experience	Year
Walmart Global Technology Services , Bangalore	My work was associated with backend and Middleware. I work on databases Hana and Teradata. For Web Services I worked on JAVA, REST APIs and Spring Framework. I also worked on sentiment Analysis. Tools used (Development tools - H/w, S/w): Spring, Maven, Hana, Teradata, Hive, Eclipse Objectives of the project: To make an application for quality managers to make their decision making easy. Outcomes of the project: The project is in testing phase by business right now. Major Learning Outcomes: How to handle with business while doing technical work, Learnt the implementation of Agile framework Brief Description of working environment, expectations from the company:-working environment is goodLots of things to learn don't come to this company with hopes of getting PPO. You won't be gettingManager review doesn't play role in intern conversion process as it's like campus process only good Brand name and gr	2016- 17- sem1
Walmart Global Technology Services , Bangalore	Created REST services for the licensed Walmart Application. Created Unit Tests for the server end of the same application. Enhanced the performance of the code. Tools used (Development tools - H/w, S/w): Node.js Objectives of the project: -To increase the operational and financial efficiency of the transportation team by logging the work timings of the employees and generating periodic reports for effective resource management. Outcomes of the project: The API developed will be used as building block for developing the layers of application. Unit testing will help in more streamlined development of code in future. This application will cut short the loss of productive time of workers by enabling them to report their work timings through mobile app. This data can be retrieved afterwards by managers. Major Learning Outcomes:Learned how to work with node.js, unit testing and performance enhancement of the code. Brief Description of working environment, expectations from the company:The working environment is fun with lots of opportunities to learn new technologies. The mentors are friendly and gives proper guidance. There are several team outings which included sports and different type of activities. The overall experience is pretty enjoyable. For PPO, pretty good knowledge of DSA and DP is required.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	I was responsible for the ETL (Extract, Transform, Load) of data from various heterogeneous databases to other databases by applying the required transforms to the data. Tools used (Development tools - H/w, S/w): Hadoop, Oozie, Crunch, Spark, JAVA, SQL Objectives of the project: -To help vendors make an informed decision by providing all the data collected at one place. Outcomes of the project: Successful in migrating the data without loss and setup a framework to do the job every day until triggered off. Was appreciated by several Directors and the CIO (Chief Information officer of Walmart). Major Learning Outcomes: I learned how to work with a large team, across several time zone and deliver the product on a strict time line. I learned how to efficiently. Learned several new technologies and how to work on a scale that was earlier unfathomable. Brief Description of working environment, expectations from the company:The working environment was good. The company expected us to know a few basic concepts of DSA, Databases and be able to comfortably work in a team.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	1. Created a dynamic web application to search for logs stored in different servers by running grep command and then make the results downloadable using JAVA Servlet. a. Various applications run in distributed environment in Wal Mart each generating its own logs in local machines. b. The project connects different machines using Hazel Cast cluster and then run grep command on it. c. The application allows user to access logs using different parameters like Date, Time, CorrelationID etc. d. The application uses multithreading to increase the search speed and maintains a local history to keep track of recent searches. e. A major challenge in the development of the application was to make the search synchronized and fast. 2. The front end of the application was also developed using HTML, CSS and Angularjs. 3. Created a smoke test for Wal Mart's application Log Collector which was used to check the overall functionality of Log Collector. The test ran using TestNG framework. 4. A number of unit tests were written to increase the code coverage in sonar. Easy Mock was used to mock the methods and write efficient Junit test cases. Tools used (Development tools - H/w, S/w): JAVA, Hazelcast, Elasticsearch , Angularjs , EasyMock, TestNG Objectives of the project: Make debugging of applications easy which are running in distributed environments by accessing logs stored on remote machines. Outcomes of the project: The web application was completely build during the PS program as well as successful smoke and unit tests were written. Major Learning Outcomes: 1. Learned how to design and build dynamic web applications. 2. Learned the importance of good unit tests and how to write them. Brief Description of working environment, expectations from the company:-Walmart, is an American multinational retail corporation that operates a chain of hypermarkets, discount department stores and grocery stores. The Bangalore center of Walmart develops and maintains the various applications running in Walmart stores, distribution centers and	2016- 17- sem1

Company	Experience	Year
Walmart Global Technology Services , Bangalore	Extraction of data from various sources like Teradata and Mainframe, applying various transformations and push it to Azure cloud. Migration and testing of data movement scripts from one Hadoop cluster to another. Tools used (Development tools - H/w, S/w): Hadoop, Hive, Teradata, Oozie, Shell Scripting, JAVA Objectives of the project: -To Extract Data from various sources like Teradata and Mainframe, apply various transformations and push it to the cloud. Outcomes of the project: The movement of data to the cloud will enable the vendors and Walmart's internals to create micro queries and effectively retrieve the data needed. Cloud will enable easy retrieval, querying, reporting and analysis of data. There will be a common simplified interface for suppliers and merchants. Major Learning Outcomes:Learnt about various Big data technologies like Hadoop, Hive, Oozie etc. Brief Description of working environment, expectations from the company:Working environment in the company is good. Very friendly and helpful people. Work may get a little boring. Getting a pre placement offer is a bit difficult. Overall, a nice place to work.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	We developed a platform for building, deploying and managing Big Data Analytic applications. It enables quicker application development with its rich set of APIs. I worked on Notification engine service and also wrote unit test cases for the services to the platform and also developed a sample web page to monitor this platform and also fixed few bugs while production process. Tools used (Development tools - H/w, S/w): Spring Tool Suite, Postman Objectives of the project: -Do exploratory data analysis for model building exercise. Takes out the complexity of scaling and monitoring of application, so applications can focus only on Business problem. Outcomes of the project: I am able to send the notification to the users regarding any logs or monitoring status and the necessary information. The unit coverage almost cent percent. Major Learning Outcomes: JAVA, Junit, Angular JS Brief Description of working environment, expectations from the company:Team interaction is good and co-operative, I gained a lot by sharing knowledge and new optimistic ways of solving a problem. The work culture was cool. Learned different technologies, interaction with other teams was great for technical help. Got lot of guidance from all. Food and atmosphere was superb.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	Project work was initially about making a shipping module application using technologies such as EJB, JPA, HSQL, CDI. Later on, the work was on performance enhancement by reducing JAVA heap size of the application. Finally, the work was on frontend side using AngularJS. Tools used (Development tools - H/w, S/w): Hibernate, JPA, Restful API, CDI, AngularJS Objectives of the project: Objective was to learn new technologies and be able enough to write industry level code, develop new services and improve the efficiency of product. Outcomes of the project: Fixed performance defects in the product which helped the team during a very crucial time of the year. (Black Friday and Cyber Monday) Major Learning Outcomes: Learnt about new technologies and what are the factors which affect the performance of a product Brief Description of working environment, expectations from the company:- Walmart labs is the software division of the giant US retail company Walmart. The working environment is really good. People are helpful and provided lot of support to the interns. Interns were treated like team members only and we contributed to the work that full time employees were doing. Company provided to-fro cab services which made travel easier in Bangalore traffic. Free lunch and snacks were a big plus. The only thing wrong about the station is there intern-conversion process. Only 2 out of 13 got PPO.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	Understand the existing architecture of "search" backend used in ASDA Groceries website, and implement various refinements for "product search" using the commercial tools (Oracle Endeca), Also, deep understanding of how search actually works and leveraging the tools to enhance its capabilities. Tools used (Development tools - H/w, S/w): Oracle Endeca, J2EE, Oracle ATG Objectives of the project: -To add search refinements in ASDA Groceries Website Outcomes of the project: Worked on the existing projects along with the Walmart team. Got to learn commercial tools used in e-commerce such as Product Catalog (ATG) and Search (Oracle Endeca). Major Learning Outcomes: Detailed understanding of backend of "Search" in any e-commerce website. Product Catalog Maintenance and the overall architecture of an e-commerce website. Brief Description of working environment, expectations from the company:Team is quite friendly and helpful. Free pantry and free cab service. Very less chances of PPO. every year they hire only a few (2/13 in our case and 1/19 last time). Also, the procedure is similar to campus hiring (coding round, tech interviews, manager round and HR round) and NOT based on your manager feedback. One can get rejected even in the HR round for no reason.	2016- 17- sem1

Company	Experience	Year
Walmart Global Technology Services , Bangalore	The project is about creating a platform that incorporates querying data and cache management, that would make it easier for Data Scientists and other teams in Walmart to implement their solutions in an easier and efficient way. Technologies involved were Hadoop, Alluxio, Spark. Most of technical aspects related to product development are already taken care in the platform. So an application developer can focus on developing their solutions forgetting about the other aspects. Tools used (Development tools - H/w, S/w): Spring Tool Suite, Hadoop, Spark, Alluxio. Objectives of the project: -Helping the data science community to get the data faster. Major Learning Outcomes: Advanced JAVA, Spring boot, Knowledge about Hadoop, Spark, Alluxio. Brief Description of working environment, expectations from the company:Working environment in Walmart was pretty good. It was a good learning curve for my future endeavors. Flexible timings, team members were approachable for any doubts regarding the implementations. Overall it was a decent learning experience in Walmart labs.	2016- 17- sem1
Walmart Global Technology Services , Bangalore	Reporting is the collection and presentation of data so that certain processes can be analyzed. Reports can either be in tabular form or graphs and provides a perspective of the data collected. Efficient reporting gives an insight on how the business works and helps the management in making strategic decisions. The web service implements the DAO pattern which is basically separating the high-level rest calls with the low-level API/data transactions. The web service had 3 main functions which were get list, execute report and custom scheduler to schedule reports. Other than coding the platform we also had to create certain reports as and when business requirements came in. Report generation mostly consists of writing SQL blocks. Tools used (Development tools - H/w, S/w): JAVA, Restful Services, CDI,Informix and Exago Objectives of the project: To create a framework for Reporting. Outcomes of the project: The team had completed 2 of the 3 major functions and had started incorporating a hazel cast cache. Major Learning Outcomes: JAVA, Restful Services and CDI. Brief Description of working environment, expectations from the company:-The work environment was great and there are a lot of smart people around from whom one can learn a lot. The timings were also very relaxed which gives time to pursue other activities. The expectation from us is to deliver the work assigned to us in the allotted time while following the coding conventions.	2016- 17- sem1
Walmart Global Technology Services, Bangalore	My project was to understand the Sanitization Service of information Security of Walmart and adding some plugins to the Service and later on integrating the Service with the Application Foundation of Walmart i.e. Strati which is an in-process library so that anyone within the Walmart can call the service. Tools used (Development tools - H/w, S/w): Spring Tool Suite, Eclipse Objectives of the project: Integration of Sanitization Service on Application Foundation of Walmart Outcomes of the project: Integrated the sanitization service on a common platform such that anyone within the Walmart can call the service. Major Learning Outcomes: Learnt how to work in a cooperate environment and understood about Information Security and learnt JAVA, Spring and how web applications work Brief Description of working environment, expectations from the company: Working Environment was nice. The people here are always enthusiastic and ready to help. Flexibility in Working hours as well.	2017- 18- sem1
Walmart Global Technology Services, Bangalore	My project was related to UI development using Angular 4. I was not very fluent in frontend development, so I was given sufficient time to get upto speed with the team. In the mean time I familiarized myself with the project the team is working on, the business logic and the current status of project. I learnt Angular from the official docs during the first two weeks. I was later included as a part of the development and I realized there is lot more to Software development than to just write a few lines of code. I was intimated with the importance of writing clean code like using descriptive variable names, writing small functions, etc. I also had the opportunity to learn about collaboration and version control using git, which greatly simplified the development process. Tools used (Development tools - H/w, S/w): I extensively used git for collaboration of the project with my team. SourceTree was used for git UI. Angular cli was used for development on angular 4. Objectives of the project: UI Development using Angular 4 Outcomes of the project: I understood how the development cycle works at the corporate level. Major Learning Outcomes: I understood how the development cycle works at the corporate level. Brief Description of working environment, expectations from the company: The work culture was fantastic. The employees were friendly and more than eager to help. We used to have planning at the beginning of every two weeks where we would discuss on what tasks we would be doing over the next two weeks. There were daily standup meetings, where every person in the team would give their updates for the previous day and what they plan to do on the current day. This helped us to closely stick to our targets and also know the status of the other team members. The working hours were flexible. Academic courses relevant to the project: Software Engineering	2017- 18- sem1

Company	Experience	Year
Walmart Global Technology Services, Bangalore	Project1: Needed to fix the bugs in order services (application to provide order details to the store managers) API and increase its performance by writing test cases using JUnit. Project2: Formation of inmemory database using Apache Ignite, so that sql queries can be executed and fetch or update the data in a more faster way than reading data from the hard disk. Tools used (Development tools - H/w, S/w): Java, Spring, JUnit, Apache ignite, SQL Objectives of the project: To improve the performance of Order Service Outcomes of the project: Performance improved from 50% to 85% Major Learning Outcomes: Learned different technology like Java, Spring, JUnit, Apache ignite Brief Description of working environment, expectations from the company: Working environment is very good. I have learned too many new things after working on different projects. My team is really supportive and Learned many things while working with them. Academic courses relevant to the project: OOP(Object Oriented Programming), DBMS	2017- 18- sem1
Walmart Global Technology Services, Bangalore	The project aims to develop scripts for crawling suppliers data from web which has to be integrated with the Suppliers Portal. The language need is mostly Python3 with a touch of JSON and HTML. The final goal of this project is to build a next-gen platform with some of the latest technologies to bring in sourcing efficiency and help accelerate Buyer Connect roadmap. Tools used (Development tools - H/w, S/w): Scrapy Framework, Python 3, HTML, XPath Objectives of the project: The project aims to develop scripts for crawling suppliers data from web which has to be integrated with the Suppliers Portal. Outcomes of the project: Helps gathering data of suppliers of all over the world Major Learning Outcomes: Learned web scraping Brief Description of working environment, expectations from the company: Work environment is very good. Sometimes there are very tight deadlines. But still you are able to cope up with that. Flexible working hours.	2017- 18- sem1
Walmart Global Technology Services, Bangalore	My project @WalmartLabs is to develop Virtual Reality commerce for Walmart. Team is divided in two parts i.e. Frontend Development and Backend Development which works in co ordination with each other. The Frontend team works in processing 3d models, render them in Virtual Reality and create a Virtual Reality store. The Backend team focuses on creating a shopping model for customers and implement functionalities like create a cart, add items to create, checkout and place an order. Both the teams in collaboration aims to create a full-fledged VR application to create a new shopping experience. Tools used (Development tools - H/w, S/w): Unity, C#, Java, JavaScript, Python, WebGLStudio, MySql, Cassandra, DBeaver, Git. Objectives of the project: To create a V-Commerce platform for Walmart. Outcomes of the project: We were successful in creating a Walmart exhibition store in Virtual Reality. Although the project has a long way to go before coming into production, it was a great learning experience working for it.  Major Learning Outcomes: Walmart is a great place to explore work domains and learn a lot if you are in right team. The most important thing Walmart provides is an open culture and flexibility in working hours. An intern is equally important is an employee while making decisions or doing work for a project. Quarterly team outings and team lunches creates strong bonding among team members. Also, Walmart is willing to go to any extent to provide resources and help developers to explore new technologies and come up with innovative solutions. Brief Description of working environment, expectations from the company: Walmart is a great place to explore work domains and learn a lot if you are in right team. The most important thing Walmart provides is an open culture and flexibility in working hours. An intern is equally important is an employee while making decisions or doing work for a project. Quarterly team outings and team lunches creates strong bonding among team members. Also, Walmart is willing to go to any	2017- 18- sem1

17/08/2020 sem1.md

Experience Year Company

> There were 3 parts in the Smart Forecasting Project that I worked on: \* Regression: Developed the framework, UI and corresponding micro-services. Based on TestNG, a common unit testing framework, similar to Junit, but better in our use case, with the following features: 1. Allows Developers to group tests by domain, service & ability to execute the domain/service tests independently. 2. Ability to define priority (Not the same as in TestNG), that categorizes the tests as P1/P2/P3, enabling decisions when a component is ready to deploy or would need additional approvals. 3. Custom reports generated, that would cater to the needs of different audience (Executives/Managers/Developers) which are, of course, much better than the default TestNG report. \* ETL: I was give one ad-hoc task for data pulling, transformation and loading. Secondly, I modified the existing ETL pipelines for better code hygiene, code coverage and removing existing potential bugs. \* POC on database selection for search: I was given a task to pick a database which can perform well in writes, pointed queries, aggregations and can be used for text search. The candidates were MongoDb, Cassandra, ElasticSearch and Solr. I tested for the relative writes per second, response time for pointed queries and simple aggregations. ElasticSearch came out on top and has a huge adoption rate nowadays. I developed related micro-service and corresponding mapping/indexing for accurate free text search. Tools used (Development tools - H/w, S/w): Looper (based on Jenkins), Hygieia (publishing code results), Sonar (for generating code hygiene reports), OneOps (cloud based VMs for deploying artifacts), intelliJ Idea, Atom and Eclipse for development, GitHub as VCS, OpenStack Swift for Object Store, Docker for Containers and CCM for Central Configuration Management. Objectives of the project: The goal of smart forecasting project was to better forecast the sales of fastmoving/perishable items to avoid over/under stocking, reduce wastage and hence, increase revenue generation for Walmart US stores. Outcomes of the project: Developed micro-services and regression tools for the Smart Forecasting project. Learned better and cleaner coding in Java, React JS and Scala. Learned how search engines work and how to modify them for our own use. Developed a sense of punctuality and responsibility. Learned about the understanding of actual scope of a production-based task. Major Learning Outcomes: Learned about open source search Engines based on Lucene, mainly ElasticSearch and Solr. Understood the importance and implemented Design principles. Mechanisms of Regression (End to end functional) testing. Brief Description of working environment, expectations from the company: Walmart GTS as a whole is a great workplace where work-life balance is a priority for the leadership. Since, it is a Fortune One Company, they have enough resources to put projects in motion. Also, a wide variety of projects from Machine Learning to Virtual Reality to normal Software Development are available. My personal experience included a steep and friendly learning curve. Mentors are readily available and helpful at ever stage. You will be treated as one of the associates and would be given work accordingly which encourages hard work and helps interns grow. The tasks given, generally, are from various domains, thus, helping in broadening of horizons, and giving a 'full stack' knowledge about the project. Also the pre-Placement hiring process was changed from

Walmart Global Technology Services, Bangalore

I was involved in development of an automated pipeline to validate product identifiers of items in walmart catalog. Tools used (Development tools - H/w, S/w): Apache Spark, Apache Hive, Apache Hadoop, MySQL. Walmart Global Technology

company: Working environment was very positive. Team was very supportive.

Software Engineering Principles, ML

2017-Objectives of the project: To validate product identifiers. Outcomes of the project: Automated pipeline was developed to achieve 50% coverage of validated items in walmart catalog. Major Learning Outcomes: Learnt HDFS, Learnt Spark programming. Brief Description of working environment, expectations from the

technical interviews and coding-round based to manager feedback, thus, making sure interns work and learn here and be rewarded accordingly. Academic courses relevant to the project: OOP, OS, DBMS,

Walmart Global Technology Services, Bangalore

Services, Bangalore

Understood the domain of Performance engineering and worked with its industry standard tools like HP Loadrunner. Got an opportunity to learn the performance aspects of the web applications that we develop. Tools used (Development tools - H/w, S/w): HP Loadrunner, Apache Tomcat, Apache Maven, Visual Studio, OneOps. Objectives of the project: Payload Automation for load testing using DLL Outcomes of the project: Successfully used DLL in loadrunner that automates the entire process of generating the payload. Major Learning Outcomes: Performance Testing and behavior of web applications in extreme stress cases. Brief Description of working environment, expectations from the company: Here at Walmart, Employees believe in collaborative learning. They expect the interns to explore new areas and do POC works. Academic courses relevant to the project: Software Engineering

2017-18sem1

18-

sem1

2017-

18-

sem1

Company	Experience	Year
Walmart Global Technology Services, Bangalore	Work done was on subjects related to Cloud Computing, Distributed Systems, Database Management and Software Development. Several different technologies like Maven, SonarQube, Jenkins, etc were used to build, develop and test the softwares being written or improved. Work related to software development included writing code using Eclipse, compiling and building on local machine using maven and deploying on server using Jenkins. Work related to database was to run some queries to add, update or delete data. Work related to Cloud Computing was related to first understand how cloud computing works and then to get familiar using a proprietary cloud platform developed and used by WalmartLabs, I had to create assemblies and then manage them on the platform. Overall I got to work with many new technologies. Tools used (Development tools - H/w, S/w): BitBucket, Jenkins, Maven, Eclipse, Confluence, SonarQube Objectives of the project: To develop and to test software using different technologies Outcomes of the project: Several different softwares were developed and tested with the help of Eclipse, Maven, JUnit, TestNG, Jenkins and SonarQube Major Learning Outcomes: Learnt several new technologies including Maven, Jenkins and SonarQube Brief Description of working environment, expectations from the company: Many new technologies and platforms are used, and they don't shy away from newer technologies or ideas. You have to find the best solution to the problem with the least cost involved, so you have to look into several different approaches to get to the final one. Agile is followed so stand ups, sprints are used as methods for planning and discussions. Java is used as the programming language to code. Spring Framework is also used. Work culture is very good. There are frequent outings. Lunch is free. Transport is provided by the company. Academic courses relevant to the project: Distributed Systems, Cloud Computing, Software Development Lifecycle, Database Management.	2017- 18- sem1
Walmart Global Technology Services, Bangalore	My work was to add API™s to the current DCC code and increase its functionality and make the code robust. Spring framework was used to inject the data dependency. Mockito was used to mock interfaces so that a dummy functionality could be added to a mock interface that could be used in unit testing. Junit was used to test the functionality of the added APIs independently. One task was convert an excel file to a JSON payload. A python script for the same had to be written. I had to plot the graphs for different error codes. Medusa was used for this purpose. Tools used (Development tools - H/w, S/w): IntelliJ, SQL Developer, Postman Objectives of the project: Adding and testing API's to the existing DCC code to extend and add more functionalities and make the code robust. Outcomes of the project: API's were successfully added and tested with real time data. Major Learning Outcomes: Boxing Algorithms, Database Management, Unit Testing, Design Patterns Brief Description of working environment, expectations from the company: Friendly work environment and flexible work timings. Good place to work as an intern. Academic courses relevant to the project: Database Management Systems, Object Oriented Programming, Data Structures and Algorithms	2017- 18- sem1
Walmart Global Technology Services, Bangalore	I worked on the project my team was working on. It involved working in Java 8, Apache Cassandra, Apache Kafka among other technologies. I created web APIs and worked on the design for one of the components of the project. I was given tasks to integrate tools to make the project as required, like swagger. Later on , I was given tasks to do proof of concepts of certain things the team wanted to implement. I was an wholesome overview of the IT industry. Tools used (Development tools - H/w, S/w): Java 8, Apache Kafka, Apache Cassandra Objectives of the project: To create visibility in the transportation operations Outcomes of the project: I created 2 major components of the project. The project is ongoing. Major Learning Outcomes: Layering of code. Good coding practices. Java 8, Basics of Databases Brief Description of working environment, expectations from the company: The working environment is quite friendly. People here are quite approachable and helpful. I was given time to learn, and then time to implement them. I was given room to grow. I think the company expects the interns to show interests and be passionate about technology. They want to see the eagerness to learn and then deliver. Academic courses relevant to the project: OOP	2017- 18- sem1

Experience Year Company PROJECT1: Picking queries from text files and run them on the given database. Save the generated results in excel file and send the files to a given mail id. All the details about the database and other requirements like the filename, sheet name etc. must come from a properties file that your code must parse. Nothing should be hard coded i.e. everything that can change must be kept in properties file. PROJECT2: Create an alerting framework to send a mail whenever a scheduled job fails. This job runs on crontab scheduling. These jobs generate a given number of files. This project was done using shell script which checked the number of files generated and the file size after a few hours of running the job. PROJECT3: Create a documentation for the product created by my team. This was done using Sphinx. Tools used (Development 2017-Walmart Global Technology tools - H/w, S/w): JDBC Driver, SMTP, Apache POI, Sphinx, Shell Script, Eclipse, PyCharm, SQL Workbench, 18-Services, Bangalore Postman Objectives of the project: Automating manual work through code and reducing manual sem1 monitoring, Creating help documentation Outcomes of the project: Successfully created a java framework for automating queries provided in a file, help documentation, alerting framework Major Learning Outcomes: Design Patterns in java, Sphinx, Database creation and query execution Brief Description of working environment, expectations from the company: Working environment was friendly and comfortable. Timing were flexible and the team mates were really helpful. We were expected to be regular and hard working. The work load is less so we were expected to research a lot on a given project and find alternate methods to do the project and choose the one most efficient solution. Academic courses relevant to the project: OOP, DBMS, DSA Project1: Smart Basket Prediction: The aim of this project was to suggest a shopping basket to a customer based on her previous shopping history. Through this project, we can build a system that saves the customer time as well as reminds her of any useful items she may have forgotten to put in the cart. This was done using an extension of FP-Tree algorithm. Project2: Real-Time Architecture for Big-Data Processing: This project aims to build a real-time architecture consisting of various Apache technologies to convert current batch processing system to a real-time processing system. This can enhance the response time of ASDA analytics team in case of any issues, and also increase ability to derive insights from data. Tools used (Development tools - H/w, S/w): Apache Spark, Apache Spark-Streaming, Apache Druid, 2017-Walmart Global Technology Apache Superset Objectives of the project: Project1: Smart Basket Prediction: - The aim of this project was 18-Services, Bangalore to suggest a shopping basket to a customer based on her previous shopping history. Project2: Real-Time sem1 Architecture for Big-Data Processing: - The project's aim was to build a big-data architecture for real-time data processing. Outcomes of the project: Project1: Build smart basket predictor for Codeathon (an intra-Walmart competition) Project2: Built real-time architecture for big-data processing Major Learning Outcomes: Learnt Apache technologies like Spark, Spark-Streaming, Druid and Superset Brief Description of working environment, expectations from the company: Friendly and flexible working environment. Very flexible timings. Good place to intern. Academic courses relevant to the project: Data Mining and Distributed Data Testing of reordering of events was successfully completed with events being tested in normal, reverse, shuffled order. Also, partial reordering of events has also been tested. UI test code for Batch Management and OP Schedule has been stabilised. Around 26 scenarios were failing. Changes in xpath and methods have been implemented as per the requirement. XML state chart parser has been converted into JSON format. DB mode of orchestrating has been removed. Sender and Receiver components have been removed as every component has the required information of the previous and next components. Tools used (Development tools - H/w, S/w): Cucumber, Eclipse, Selenium Objectives of the project: Testing of 2017-Walmart Global Technology events which can come in any sequence had to be done. UI automation of Batch Management page and 18-Services, Bangalore OPSchedule page had to be done. XML format in order orchestrator had to be changed to json format. sem1 Outcomes of the project: Reordering of events successfully tested. Batch management and OP Schedule pages successfully automated. Major Learning Outcomes: Learning of tools like Cucumber and Selenium. Brief Description of working environment, expectations from the company: Initially, the work environment was good. But my expectations did not match later on. They gave me work related to testing only despite of asking for any other profile work. My mentor was also not very supportive towards my work and did not like when I took even little help from my team mates. Academic courses relevant to the project: Object Oriented Programming

Experience Year Company Major part of my work was in Testing Automation of some of the components created by the development engineers of the team Order Fulfillment. I had to write the automation code for three different components, and then write different test cases for each of them to cover up as many scenarios as possible. The Automation code was mainly written in Java, and for that, Eclipse IDE was used. The Automation suites were created using Cucumber, which uses Selenium Driver. In the Cucumber, all the test cases are written down in the form of steps, and a step definition file is created to describe the outcome of each step. The test cases were mainly written in JSON format, since the application mainly reads messages from queues and publishes the outputs to queues too, and JSON messages are the easiest and least memory occupying solution. Some time, near the end of the PS, was spent writing J-Units for some of the components to help the developers spend their time more in bug fixing and code refactoring. I was able to 2017-Walmart Global Technology write the J-Units for 3 different modules and also help a bit in the refactoring. Tools used (Development 18-Services, Bangalore tools - H/w, S/w): Eclipse, Cucumber, TestNg, WireMock, Mockito Objectives of the project: Testing sem1 Automation of various components of Order Fulfillment. Outcomes of the project: Three different components were automated and pushed to pipeline. Integration Test also done successfully. Major Learning Outcomes: Thorough understanding of Testing Automation using Cucumber. Brief Description of working environment, expectations from the company: The working environment at Walmart was good. Team scrums were held everyday to share the blockers faced, the work goal for the day, coming up for some solution for common issues, etc. There were various team outings to have non-work related conversations with team members to have better relations with them. The team members were generally ready to help whenever I required some kind of assistance to progress in my work. Academic courses relevant to the project: Object Oriented Programming in JAVA The project involves various tasks for the development of a Virtual Store on Unity. The work involves programming in C#, on Unity platform, for a Virtual Reality application. Processing.js was used for data visualisation of customer behaviour in Virtual store through heatmaps. An Augmented Reality iOS application was also developed as a POC and integrated with the Sams Club application using ARkit on Xcode Tools used (Development tools - H/w, S/w): Unity, C#, Arkit, Xcode, Processing.js, HTC Vive, Samsung Gear VR Objectives of the project: 1) Development of Virtual Reality Store in Unity2) Heatmap 2017-Walmart Global Technology Development in Processing.js 3) Augmented Reality app development using ARkit Outcomes of the project: 18-Services, Bangalore 1) Development of Virtual Reality Store in Unity2) Heatmap Development in Processing.js 3) Augmented sem1 Reality app development using ARkit Major Learning Outcomes: Learnt Unity3D development, scripting in C# Using Processing.js for data visualization ARkit development in XCode. Brief Description of working environment, expectations from the company: Employees are very approachable and helpful. Hours are quite flexible. Work load varies, depending on the project requirements. Team made sure I had work to keep me involved at all times and was made to feel a part of everything going on. Overall a wonderful learning experience. Academic courses relevant to the project: Object Oriented Programming

Company Experience Year

1) Data archival in HADOOP Motivations Improve performance of the Informix(our data warehouse) database Reduce storage cost Maintain historical data typically for audit purposes, or government mandated compliance The inexpensive cost of storage for Hadoop plus the ability to query Hadoop data with SQL made Hadoop the prime destination for data archival. The key Hadoop technology used to perform the archiving was Sqoop. Sqoop takes the database table and automatically generates the necessary classes that represent the rows from the table. Once this was done, data was imported into the Hadoop Distributed File System (HDFS). Academic Domain: Big Data Technologies Learned: HDFS, Sqoop, SQL, Informix 2) Performance test suites automation Motivation: Simplify as much of the testing effort as possible with a minimum set of scripts. Execute tests, report outcomes and compare results with earlier test runs. Ensure production level code safety The suites were written in java using TestNG. TestNG provides a framework to run test methods, test classes and test cases in parallelly. I have written performance tests that covered 40+ scenarios I also implemented concepts of multithreading that led to 80% improvement in running time of test suites Academic Domain: Software Testing Technologies Learned: TestNG, SQL, REST web services, Apache Ignite, IBM MQ Tools used (Development tools - H/w, S/w): HDFS, Informix, TestNG, SQL, REST web services, Apache Ignite, IBM MQ, JDBC, Spring Objectives of the project: 1) Data archival in HADOOP 2) Performance test suites automation Outcomes of the project: 1) Archived yearlong data of 1 million entries in HDFS 2) Wrote performance tests that covered 40+ scenarios that ensures production level code safety. Implemented multithreading that led to 80% improvement in running time of test suites Major Learning Outcomes: 1) Bucketing and partitioning in HADOOP. 2) OOP and OOAD concepts. 3) MultiThreading Brief Description of working environment, expectations from the company: My journey at Walmart started with very little knowledge of the IT industry. I had taken courses in Objected oriented programming and Operating systems as part of disciplinary electives. These courses helped me a lot in understanding various other concepts. During this period I have explored topics like Database management systems and Networking. I was fortunate enough to intern in a dynamic team where I was given every opportunity to learn the technologies used. I was given sufficient time to grasp new concepts. The team was receptive, and time and again helped me in all the challenges I faced. All the trainees and new joinees in the GIF department were given daily sessions on what every component in GIF does. It was during these sessions that I was able to learn a lot about the functioning of the entire GIF as a whole. It was amazing to witness how every team collaborates to fulfill orders to the customers keeping the lowest price on the block• commitment. The exposure given has been great. I was the only intern to provide production support during the Walmart holiday season. My experience here @WalmartLabs has

Walmart Global Technology Services, Bangalore 2017-18sem1

Walmart Global Technology Services, Bangalore 1. created a service for Walmart which has end to end pipeline for real time, daily level, weekly level metrics dashboards. It is used to visualise the trends, data by business people as well as Engineers. It includes application, business and system metrics. 2. I wrote a Scala script which populates out team table in a formatted way from many other tables such as email-sends, ERO and many more. 3. I explored the Graph-Databases such as Neo4J, OrientDB, JanusGraph for the team as data consists of lot of mapping between various users, as data in Graph-Database would be easy for traversal as well for providing recommendations to the users. Tools used (Development tools - H/w, S/w): Kafka , Kibana, Grafana, Medusa, Hive, Telegraf, ElasticSearch, Redis, Neo4J, OrientDB, JanusGraph, Airflow. Objectives of the project: 1. To help Business people as well Engineers to visualise the trends of various metrics such as Walmart Orders, Jet Orders, Hayneedle Orders. 2. To help organise the data in a particular format removing the redundancy to consume data efficiently. 3. To make queries faster and keeping all data of a user in only 1 place as well as providing recommendations to the users depending upon neighbours. Outcomes of the project: 1. Increased Efficiency. 2. Decreased Labour Work. 3. Increased Automation. 4. Decrease Query Time by a factor of 100. 5. Increased QPS. Major Learning Outcomes: 1. Scala 2. Python 3. Creativity 4. DashBoarding Details of papers/patents: Case study - A case study on the comparison of different software tools for automated scheduling and backfilling of data Brief Description of working environment, expectations from the company: Working Environment is good. People are dealing with real time applications here and handling all the data of Walmart. Free food is one of the privileges. My expectations from comapany is to provide comfort level, learning and always growing slope of an employee, which are there in WalmartLabs. I will refer this station to my juniors. Academic courses relevant to the project: Data Structures, Pattern Designing, Operating Systems, DataBase Management, Networking. Student

been amazing. It felt very engaging to work in the fortune one company. Academic courses relevant to the

project: OOP, OS, DSA, DBMS, Networking

2017-18sem1

Company	Experience	Year
Wealth India Financial Services Pvt. Ltd	SIP with Insurance, being an exclusive product, everything had to be done from scratch for the investment in portfolio. Though there was option to invest in single AMCs, it wasn't good in functionality, usability and visuals. So it needed a new design too. Firstly, the product requirement document was created and all the requirements were extensively written considering all the use cases, back-to-forth. This included Quickreg flow and existing user flow on all our platforms- web, mobile, android app and ios app. Tool used (Development tools - H/w, S/w): GA, GAMOOGA, JIRA, etc. Objectives of the project: The objective behind this project is to create concept designs for existing product modules. It includes generating ideas that will increase the user engagement and retention on our platform be it either app or web. This is done through benchmarking, conducting usability studies with customers, identifying customer pain areas and some other steps. On the basis of these steps, we focus on improving the design and functionality of the product. Major Learning Outcomes: Building any product is an extensively iterative process. We have to first understand the product requirement end-to-end, including the happy flow, exception and edge cases. Following this we devise the strategy of approach as how will we solve the problem. In case of a design-oriented project, we begin with a wireframe and then produce a first cut of the design and after numerous iterations, alterations, final design is selected and forwarded to developers. As a product manager, you have to look at all the aspects, all the impact it will cause to other products and the impact other products will cause to yours. Name: Arghae Singh (2015A4PS0351P)	2018- 19- sem1
Wealth India Financial Services Pvt. Ltd	Work done on referral marketing and Search Engine Optimization. Worked on the User Interface, data, mails, notifications etc. Improved the ranking by using various SEO techniques in the company's blog. Tool used (Development tools - H/w, S/w): Google Analytics, Gamooga, Ahrefs, Jira Objectives of the project: Top increase the referral numbers of the website as well as mobile and increase organic traffic to the site Major Learning Outcomes: Learned about UI design, How to make a product easy to use and improve SEO of any website Academic courses relevant to the project: Had to learn everything from scratch Name: Akshat Srivastava (2014B3A40548G)	2018- 19- sem1
Wealth India Financial Services Pvt. Ltd	Studied and analyzed the Onboarding Workforce of FundsIndia and provided necessary recommendations and suggestions for innovation. Identified advisor specific factors that affect lead count and estimated the lead count, connected and total calls that should be made by an advisor per day. Studied the relevance of different connectivities especially attempt connectivity. Submitted daily reports representing the 5-minute calling status for the onboarding advisors. Proposed a point calculation system for ranking advisors based on their performances. Tool used (Development tools - H/w, S/w): R, MS-Excel, SQL Objectives of the project: To study and analyze the Onboarding Workforce of FundsIndia and provide necessary recommendations and suggestions for innovation. It majorly focuses on developing metrics to measure the efficiency and productivity of an advisor. Major Learning Outcomes: The Workforce Management Role at FundsIndia involved a lot of independent data analysis to suggest ideas for innovation capable of incorporating within the division's process. These include advisor specific lead count allocation, identifying unique customers from calls, finding the attempt connectivity for dialer and landline, Calling regusers within 5 minutes of registering and also gamification and leaderboard. Brief Description of working environment, expectations from the company: Working environment is good and encourages independent working. Wealth India should focus more on developing systems that make interns more inclusive in the company. Academic courses relevant to the project: Data Analysis Using R & Excel Faculty Name: Vinay Belde	2018- 19- sem1

Company	Experience	Year
Worley Parsons India , Mumbai	The company needed a way to query data from hundreds of spreadsheets and databases via voice commands that will help save hundreds of manhours. I developed an Alexa Skill that makes a request to an Elasticsearch endpoint to query JSON data. I hosted my code on AWS Lambda which I connected to Alexa Skill. The Lambda was put as an endpoint for the Alexa Skill and the Alexa skill was a trigger for Lambda. Developing this taught me a great deal about how to work together as a team in developing a large application and about SDLC (Software Development Life Cycle) in Agile incarnation. During development, I have gained a deeper knowledge about NNLP (Natural language processing) and about AWS. Andrew Ng, an adjunct professor at Stanford University described AI as the 'next electricity', because just like the discovery of electricity, the advent of AI-powered applications will significantly increase the quality of life of everybody around the world. Similarly, using Alexa AI to connect to multiple databases would save a tremendous amount of manpower and help the organisation be more efficient. Working on this project helped me gain a hands-on approach to coding in two different languages (Python and Java), several platforms, and a lot of other computer science related tools and softwares. It also developed my interpersonal skills as I learnt to work as a part of a large team. Tool used (Development tools - H/w, S/w): AWS Lambda, AWS Elasticsearch, Kibana, SSMS, Python, Java, Atom, Notepad++ Objectives of the project: A way to query data from hundreds of spreadsheets and databases via voice commands that will help save hundreds of manhours Major Learning Outcomes: Working on this project helped me gain a hands on approach to coding in two different languages (Python and Java), a number of platforms, and a lot of other computer science related tools and softwares. It also developed my interpersonal skills. Details of Papers/patents: Brief Description of working environment, expectations from the company: Academic courses	2019 20- sem1
Worley Parsons India, Hyderabad	Conversion of scanned images to CAD files involved template matching, optical character recognition, and line segment detection. Template matching finds templates(reference) in small parts of an image which match the template. OCR helps converting images of typed, handwritten or printed text into machine-encoded text, to be placed later in the CAD file at appropriate coordinates. LSD is a API of OpenCV-Python, used to detect lines in an image with false detection control. For Document Classification we made use of Natural Language Processing, which involves the interaction between computers and human (natural) languages. For Flaw Detection in placement of Document Tags, we used CNN, trained in-house on images converted from PDFs, to differentiate between right and incorrect placement of Document tags (overlapping text, figures etc.). Tool used (Development tools - H/w, S/w): Python, tesseract, OpenCV, Natural Language Processing, Convolutional Neural Network Objectives of the project: Automating processing of documents Major Learning Outcomes: Worked using Python for Computer Vision, Optical Character Recognition, Language Processing Brief Description of working environment, expectations from the company: Colleagues and Supervisors are quite friendly and helping. There is always enough time to learn new stuff which you are asked to work on or implement for the ongoing project. Academic courses relevant to the project: Machine Learning, Neural Networks, Artificial Intelligence	2018 19- sem <sup>2</sup>
WorleyParsons, Mumbai	During the development of the chat-bot, for understanding of the language and give correct results for every user input, we have used Microsoft's LUIS API. We trained the AI to understand the intent behind a given user input and give the desired result based on the entity it recognizes. To develop the architecture for deployment of Machine Learning Programs on the Geographic Information System, we created our own sample program, and developed the architecture using that as the basis. It will be able to support other programs in the future. For development of Access Control on the Geographic Information System (GIS) web application, we used database to store the access level of a particular user. Meanwhile log-in was handled using Microsoft Azure, which WorleyParsons already avails service of, and it was incorporated in the web-app. Tool used (Development tools - H/w, S/w): NodeJS, Python Objectives of the project: Built GIS based Health and safety application Major Learning Outcomes: Learnt Web Development Brief Description of working environment, expectations from the company: Working Environment is conducive. They support you to complete your task in all ways possible. They also provide all the resources you need to complete your task. Academic courses relevant to the project: Machine Leaning	2018 19- sem <sup>2</sup>
Xilinx	I worked on performance analysis tools development. My work was on noc analysis. Besides this I worked on DDR, AXI. Tool used (Development tools - H/w, S/w): Python, C++, System C, MYSQL, SQLite Objectives of the project: To develop efficient tools so that the performance of noc could be evaluated Major Learning Outcomes: Learnt python, c++,cmake, perforce and corporate politics Academic courses relevant to the project: C programming. Name: ADITYA VISWAKUMAR (2015A8PS0457H)	2018 19- sem1

Company	Experience	Year
Xilinx	ENGINEERING DESIGN AUTOMATION. Developed tools to monitor various parameters of FPGA devices. The tools to monitor following parameters were developed. 1- Leakage Current . 2- Failure In Time. 3-Trend analysis of device models. 4-Device selection subject to resource constraints. Tool used (Development tools - H/w, S/w) : S/W - Linux, Apache , MySQL , PHP, Vivado. jQuery, High charts, Google Charts. chart.js Objectives of the project : Development of tools to monitor various device parameters. Major Learning Outcomes : 1- Got an insight to Full Stack Development. 2- Learned about FPGA architecture. 3- Leaned various webpage development frameword Brief Description of working environment, expectations from the company : Working Environment - Cubicles where alloted with allow necessary resources need for work. Academic courses relevant to the project : c programming. Name : Sri Harsha Kariveda (2015AAPS0196H) Objectives of the project : PERL scripting Brief Description of working environment, expectations from the company : The people here are really nice. Managers are extremely kind and friendly. Overall a very good environment to work in. Academic courses relevant to the project : Computer Programming , ADVD Bangalore	2018- 19- sem1
Xilinx India Technology Services Pvt. Ltd. , Hyderabad	Testlink is open source test management software used by our team. My major work was related to that. It involved documentation of testcases in testlink. Also enabling LDAP support for testlink. My major project was to write a python script to automatically get test results from the Result Viewer webpage and update these Test results in corresponding Testplan of Testlink. This was done using python webscrapping using requests and beautifulsoup libraries and testlink API. Apart from this I also had to improve some scripts written in shell. Tool used (Development tools - H/w, S/w): Python, Testlink, Shell Objectives of the project: Automatic updation of results in Testlink Major Learning Outcomes: I learnt shell scripting and python programming. Using different libraries of python like requests, beautifulsoup, pandas etc. Details of Papers/patents: None Brief Description of working environment, expectations from the company: The work environment of the company is very good, All the team members are very friendly and helpful. The manager guided me through the project at each step giving help whenever required. The mentor was also very good and gave advice on not just project topics but for future knowledge and career too. Overall the company is very good to work at. Academic courses relevant to the project: Programming in C, FPGA	2019- 20- sem1
Xilinx India Technology Services Pvt. Ltd. , Hyderabad	I was a part of team that does various operations that validate, emulate and simulate the RTL code before it makes it way to silicon. I was asked to make hardware designs so that software team could write applications to test various interfaces, test various peripherals and interfaces of an unreleased product and debug subtle issues on hardware by probing with an oscilloscope. Finally, I was given a serious and a huge project which aims to test the on-chip CAN controller. I successfully proposed the microarchitecture of the tester IP and got it approved. Tool used (Development tools - H/w, S/w): Vivado, bash, python, sed, awk Objectives of the project: To test the on-chip CAN controller according to the ISO test spec. Major Learning Outcomes: CAN protocol, FPGA design flow, SystemVerilog, Static Timing Analysis, Clock Domain Crossing Details of Papers/patents: Nil Brief Description of working environment, expectations from the company: Working environment is GREAT. No complaints whatsoever. Employees here are highly motivated at the same time, flexible. Managers are highly supportive and they understand you. I was a part of a hardware team and was the only BE guy. Also, PPO chances for B.E may not be there. However, chances of you getting hired are substantially higher when xilinx come for campus placements. Academic courses relevant to the project: Introduction to FPGA, Digital Design, Comparch Student	2019- 20- sem1
Yale University , Norway	The objective was to build computer vision based mobile apps for Android and iOS to detect and score events in sports, specially footballs drills such as counting the number of football juggles etc. The goal of the apps developed were such that they can be used out of the box with no setup, calibration or internet and produced accuracies of >98%. Tool used (Development tools - H/w, S/w): For iOS Hardware: iPhone X, Macbook pro mid 2015 Software: XCode, Javascript For Android Hardware: OnePlus 6, Huawei P20 Lite Software: Android Studio, MLKit Objectives of the project: To detect and score sports drills using computer vision in mobile Major Learning Outcomes: Machine learning, object detection, tracking algorithms, multimedia dataset, iOS development, Android development, APIs, Google Firebase Details of Papers/patents: Brief Description of working environment, expectations from the company: Due to issues with visa we have not been able to visit the office. We worked from Bangalore during most of the project, and later in the Molde Analytics office in Hyderabad. We had flexible hours in Bangalore. We got to choose the components we would like to work on and set our own deadlines. All hardwares (Macbooks and iPhones) were bought for us. Workload was easy to moderate, and work was extremely interesting and educational. Molde Analytics had expected work-duration of 8 hours a day, with flexible in and out timings. The office is small but has all the required hardware. Academic courses relevant to the project: Data structures and Algorithms, Object oriented programming, Neural Networks and Fuzzy logic, Machine Learning Bangalore Student	2019- 20- sem1

Company	Experience	Year
Yrals Digital India Pvt Ltd., Mumbai	Keyword extraction is the area of text understanding algorithm which has been around for a while as it has been used by law firms to understand the documents much well than already done by the lawyers so that it become easy for them to quickly go through the documents . Tools used (Development tools - H/w, S/w): Python, sklearn, pandas, numpy Objectives of the project: Keyword Extraction lies at the out front of GISTAI, the one component which improves the presentation of the product and also helps in automating some components of the current software. Outcomes of the project: The project turned out to have an accuracy pf 85 %. Major Learning Outcomes: Machine learning, deep learning Brief Description of working environment, expectations from the company: The working environment was great and taught us how to work on a project from the basis to the end . Academic courses relevant to the project: Machine learning, Computer Vision, Deep Learning.	2017- 18- sem1
Yrals Digital India Pvt Ltd., Mumbai	Worked on 2 machine learning projects-'green screen removal and twitter trends' and 1 deep learning project- 'sentiment analysis'. Green Screen included working on image data to remove green colored background using logistic regression. Twitter trends model predicted the virality versus time for tweet trend data. And, implemented a RNN model on IMDB reviews & sentiment data to predict the sentiment of news articles for GistAl (GistAl is the product that Yrals) Tools used (Development tools - H/w, S/w): Used our own laptops, installing cudNN to implement tensorflow models. All the implementations were done using python and made live on Gist server using PHP and HTML. Objectives of the project: Sentiment Analysis - to predict sentiment of news titles so as to provide appropriate suggestions to users. Green Screen- To provide automated chroma keying effect to videos without using Adobe products. Twitter Trends - to provide clients with viral hashtags that can be used to make viral videos Outcomes of the project: Sentiment Analysis - Test accuracy was 80%. Green Screen Removal- Green background was removed and results were equivalent to Adobe products. Twitter Trends - Prediction accuracy score was 86%. Major Learning Outcomes: Python (working of pandas and numpy mainly), machine learning implementations in sklearn Brief Description of working environment, expectations from the company: Projects were very interesting but the company has no mentors and resources to provide to anyone. If you are looking to learn and implement by yourself, Yrals provides freedom but don't expect help as there are only 3 senior employees in the company. Mentors provided to us were fresh out of college and didn't have hands on experience with machine learning. Also, there is lack of proper management and clear communication within the company. It's not a place where I would like to become a full time employee. Academic courses relevant to the project: Machine learning, object oriented programming, Al	2017- 18- sem1
Yrals Digital India Pvt Ltd., Mumbai	Text Categorization - Deep Learning RNN Image Effects - Python Coding Ffmpeg and moviepy Twitter Trends page on the website - PHP, Html and Css coding Tools used (Development tools - H/w, S/w): Python, Tensorflow, Php Objectives of the project: To be able to give users different kinds of effects each time they make a video and for each clip of the video for whatever duration of the video is. Outcomes of the project: There is a huge improvement in the productivity as now each time a different effect is shown without having to hardcode it. These effects are automated and will generate different motion of clips each time it is made. This is currently in the testing phase and soon is going to be made the default effect on the company's website. Major Learning Outcomes: Correct category of the news articles is predicted Brief Description of working environment, expectations from the company: If you're producing results then it's okay, the moment you start to produce less results you will be bothered about it. I had a lot of fun here completing the projects but I wouldn't want to work here in future. Academic courses relevant to the project: Machine Learning, C programming	2017- 18- sem1

Company Experience Year

Article Summarisation- The article summariser used by the company to summarise articles was not working properly for long articles and sometimes didn™t render appropriate results and needed improvement. I improved the Summariser by using a technique called Aided Summarisation. LexRank Summarisation technique is used for Extractive summarisation and the summary is enhanced using sentence ranking algorithm based on title matching score and content diversity score calculated by sentence similarity algorithm. The sentence similarity algorithm is created using gensim word2vec model. Object Detection:-The Object detection is done using tensorflow pre-trained models trained on the COCO dataset that consists of 80 object categories. The videos are converted into a list of numpy arrays using the moviepy module. Scene detection is done on the video to reduce the time taken by the detection algorithms and is performed using the ffmpeg library. The video is converted into a series of sub- clips that can be loaded into memory. The detection algorithms are run on these sub-clips and at the end they are concatenated using the moviepy library. Face Recognition:- The system architecture is divided into three processes- Face Detection, Converting Detected Faces into a format that are easily comparable to the faces stored into the dataset, actual recognition by similarity calculation. Face Detection is done using MTCNN. Face Embeddings is created using FaceNet. Embedding LookUp is done Clustering algorithm. Tools used (Development tools - H/w, S/w): Anaconda, Amazon Lambda, Amazon EC2 instance, Python, Tensorflow, Keras Objectives of the project: Article Summarisation:-The GIstAI platform, companys key product is a video creation tool developed for news companies to convert their articles into news videos. The articles are fetched from their websites ,summarised and reduced to appropriate size for creation of videos without significant loss of information. The summariser was not working properly for long articles and sometimes didnt render appropriate results and needed improvement. Object Detection:- Object Detection is quite popular in the industry but serving good models as an API to clients for them to upload videos and get object detections is where the problem starts. Face Recognition:- The objective is to develop a Largs Scale Facial Recognition System that is able to recognise identities efficiently from a database pool of millions of faces. Outcomes of the project: Article Summarisation:- The system is live on the GISTAI Platform and is able to render good summaries. Object Detection: - The object detection is model is live on the Google Cloud ML Platform and is able detect objects out of 90 categories. Face Recognition:- The model is linearly scalable and is able to look up the database and recognise the faces out of a pool of millions of faces. This model is live on a AWS EC2 instance. Major Learning Outcomes: Tensor flow Serving, Object Detection API. Convolutional Neural Network. Recurrent Neural Network, Python Brief Description of working environment, expectations from the company: The engineers in the company

Yrals Digital India Pvt Ltd., Mumbai 2017-18sem1

Zendrive India Pvt Ltd, Bangalore **Programming Student** 

Confidential work: Building an algorithm to detect stationary periods of a smartphone using motion sensors. Analysing and matching collisions detected by Zendrive. Generating real-time Hard Brake and Hard Turning alerts. Tools used (Development tools - H/w, S/w): R (language) Objectives of the project: Detecting the periods where the smartphone is stationary Outcomes of the project: The detector is being used as a precursor to numerous other activity detectors to improve accuracy and reliability of predictions. Major Learning Outcomes: Basic signal processing, analysing time-series data, programming and plotting in R. Brief Description of working environment, expectations from the company: The working environment is similar to other US based startups. Informal, but hard working culture. The company does not expect interns to have detailed knowledge beforehand, but knowing basics of signal processing, machine learning and programming skills can help. Academic courses relevant to the project: Digital Signal Processing, Machine Learning Faculty Comments: Expectations from industry: Students need to have knowledge in the areas of predictive analytics, machine learning, deep learning, Artificial Intelligence and Big Data Analytics Student

are supportive and the quality of projects is good ,but the management needs improvement. The company

has communication problems which often leads to unnecessary conflicts and makes the working environment unpleasant. Working in the company is good for inexperienced programmers but do not expect a good pay or a PPO. Academic courses relevant to the project: Machine Learning, Computer

2017-18sem1

Zeotap India Pvt. Ltd., Bangalore Challenging work. Big Data. Extracting information from the pages user visited and building his interest graph over time. Core Area: NLP Machine Learning. Tools used (Development tools - H/w, S/w): Python, Git, Bash, Keras, tensorflow, Numpy etc Objectives of the project: To find what the user was interested in when he visited the page. Outcomes of the project: To find what the user was interested in when he visited the page. Major Learning Outcomes: NLP, Machine Learning at scale Brief Description of working environment, expectations from the company: Very friendly culture. Flexible office hours. Academic courses relevant to the project: Information Retrieval, Machine Learning

2017-18sem1

Company	Experience	Year
Zeotap India Pvt. Ltd., Bangalore	Built an automate system of zeotap only generating product with the help of java play framework, python for migration from old system and design a proper database and tables for implementation. Tools used (Development tools - H/w, S/w): Amazon EMR Cluster, Amazon Web services, Python, Java, Play Framwork Objectives of the project: Automate the only revenue generating product in Zeotap as of now. Outcomes of the project: Automation is provided with many new features. Major Learning Outcomes: Proper Understanding of how to write production code, learn new languages like go, scala as part of training programme, in depth knowledge of database systems Brief Description of working environment, expectations from the company: Work culture is quite good. You just need to complete work on time. In terms of PPO, don't expect anything from the company. How much you contribute doesn't matter in case of PPO. There are very less chances they will give you. You will learn more if you contribute more. That's all. Academic courses relevant to the project: Database management, Data structures & Algorithms, Object Oriented Programming.	2017- 18- sem1
Zeotap India Pvt. Ltd., Bangalore	I completely tested a backend program. We as a team of 3 did POCs on nosql databases and their performances using aerospace, citusdb, etc. We also worked on a POC on a probabilistic data structure called BloomFilter Tools used (Development tools - H/w, S/w): Golang, Python, Postgres, Areospike Objectives of the project: Testing, Proof Of Concepts Outcomes of the project: Successfully tested the backend product with more than 100 test cases and 89% coverage. All the POCs are being converted into full fledged products. Major Learning Outcomes: Testing, Software Design, OOP, nosql databases. Brief Description of working environment, expectations from the company: Working with colleagues every day that have the same positive energy and excitement as you do. Creative work environments that are designed to feed your creativity. Regarding expectations, Ownership is the most important thing which comes to my mind. One needs to own his/her work. He/she should know all the ins and outs of the work as he will be the Go To person in case of any kind of issues related. Efficiency and good coding skills is also a primary requirement. Academic courses relevant to the project: Distributed Systems, DBMS, OOP, Operating Systems, DSA	2017- 18- sem1
Zeotap India Pvt. Ltd., Bangalore	Built AWS resource cost monitoring tool. Built an inventory management tool which would get all the hardware and software information from user machine and post it on the server. Migrated code from php to GOLang. Also worked on AWS. Tools used (Development tools - H/w, S/w): AWS, Datadog, Manage Engine. Objectives of the project: Built a tool which would show the cost of using resources on per hour basis. Built a tool for machine config and security. Reduce latency of already running project. Outcomes of the project: Cost monitoring tool built. Inventory management tool built for macusers. COde migrated from PHP to GOLang. Major Learning Outcomes: Cloud Computing, GOLang. Brief Description of working environment, expectations from the company: Good work culture and helpful people. Company expects to deliver quickly. Not good for people learning new who crave for learning perfection rather than speed. Academic courses relevant to the project: Networks.	2017- 18- sem1
Zeotap India Pvt. Ltd., Bangalore	Front End development of various web consoles that were essential products for the organizational members as well as external allies like data partners. After development of the projects, applications were tested through different frameworks. Tools used (Development tools - H/w, S/w): Hardware – MacBook Frameworks - Angularjs, reactjs Objectives of the project: Development of web console for automation of data extracted from telecom partners and displaying organization related statistics Outcomes of the project: Development of two different web applications that were brought live after thorough testing. Major Learning Outcomes: HTML, CSS, JS, ReactJS, AngularJS, design patterns Brief Description of working environment, expectations from the company: Team culture was very good. As far as work is concerned, only the outcome is what matters, rest all depends on the employee. Proper deadlines were set for every quarter for the company, which were further drilled down to individual goals. Academic courses relevant to the project: OOP, JS Student	2017- 18- sem1
Zinnov Management and Consulting,	Zinnov is a strategic consulting firm, while working in zinnov I got great exposure to consulting projects and learned about different industries like automotive, healthcare etc.I really liked the work and my team MESP (Market expansion for service providers) helped various service providers like Wipro,Quest global,TCS etc with strategies to enhance their revenue and help them grow. Apart from work, the office culture was just amazing, everyone was very helpful, patient ,understanding & acknowledged the work. We were exposed to client calls as well and got the essence of consulting. It was a great experience working in zinnov. Tool used (Development tools - H/w, S/w): Excel, PowerPoint Objectives of the project: The project was Merger and Acquisition, helping service providers to acquire the required firms helping them to grow Major Learning Outcomes: How consulting firms actually work, industry knowledge, confidence, believing in your work Academic courses relevant to the project: Fundamental of finance & accounting. Name: MOHINI PANDEY (2015D2TS0991P)	2018- 19- sem1

Company	Experience	Year
Zinnov Management and Consulting,	I had a totally new experience with an exposure to professional world and a team where every team member was ready to listen to your challenges and achievements and come up with better projects for you. Tool used (Development tools - H/w, S/w): LinkedIn search, Data analytics Objectives of the project: Zinnov Zones IoT rating and Smart Manufacturing opportunity analysis in Automotive Major Learning Outcomes: Data analysis tools, Data Collection, Opportunity insights Brief Description of working environment, expectations from the company: The team was really really supportive in every way. One of the key features is there is no hierarchy and thus it makes you comfortable to approach team people with any problems. Academic courses relevant to the project: POM, FundaFin, DRM Name: Rashi Singhal (2015A5PS0940P)	2018- 19- sem1
Zinnov Management and Consulting,	Talent and Sales Analysis. Work with a team to prepare talent and sales decks according to market research, in accordance with clients' description Tool used (Development tools - H/w, S/w): MS Powerpoint, MS Excel, Linkedin Objectives of the project: Talent and Sales Analysis Major Learning Outcomes: Excelled in MS Powerpoint and Excel, Learnt new tools like CartoDb and more features of Linkedin, sales navigator and recruiter. Learnt to do market research effectively and get insights from various sources Brief Description of working environment, expectations from the company: Friendly, flexible hours, helpful seniors. Have to learn on your own through experience while working Academic courses relevant to the project: Principle of Management, Current Affairs Name: Rashi Singhal (2015A5PS0940P)	2018- 19- sem1
Zinnov Management and Consulting,	I did market research to make talent and sales enablement decksaccording to client's specifications and provide insights on the same Tool used (Development tools - H/w, S/w): MS Excel, MS PowerPoint, CartoDb, LinkedIn, Sales Navigator, Recruiter Objectives of the project: Talent analysis and Sales Enablement Major Learning Outcomes: New features of MS Excel and PowerPoint, basic functioning of consultant, CartoDb, doing market research effectively Brief Description of working environment, expectations from the company: Friendly people, flexible hours, helpful seniors you can learn the basics of being a consultant while working in the firm. you can get a pretty good idea of corporate working culture here Academic courses relevant to the project: Current Affairs, Supply Chain Management Name: Vedant Navandar (2014B4A20610P)	2018- 19- sem1
Zinnov Management and Consulting,	GIC Landscape report: Involving secondary research to find out data, analyze data and prepare a report on the current landscape of GICs in India. Second phase included mapping ongoing works on new age digital talent for these MNCs Tool used (Development tools - H/w, S/w): Excel, Powerpoint Objectives of the project: Preparring the complete GIC report. Major Learning Outcomes: Excel, Research skills, Powerpoint, Decision making, Location Analysis, Verticals Brief Description of working environment, expectations from the company: You'll be expected and taught to have a good knowledge of the Microsoft Suite. Working environment is cool and no one bothers you to keep on working all day. Need to stay full time and cannot leave if you have completed your assigned tasks. Chances of PPO are high, provided you work and present yourself well. Projected as management consulting but job is basically to do market research. Taking more leaves can be an issue. You will improve on your soft skills, presenting abilities and MS office skills. Name: Kaushal Kisshor (2015A4PS0421P)	2018- 19- sem1
Zinnov Management and Consulting,	The work was related to report building and presentation deck development. Tool used (Development tools - H/w, S/w): Microsoft office Objectives of the project: To build report on GIC landscape in India Major Learning Outcomes: Knowledge about various industries and digital technologies, deck designing and Microsoft Excel. Aaprt from this, soft skills were developed. Brief Description of working environment, expectations from the company: Very healthy working environment, no heriarchy, everyone is very helpful and approachable. Name: Binoy A Sen (2015A1PS0604G)	2018- 19- sem1
Zinnov Management and Consulting,	Work on providing talent analysis to key locations and key job roles according to the client's interest. Tool used (Development tools - H/w, S/w): Data Miner, Excel, Powerpoint, Carto, Objectives of the project:  Talent Analysis and Sales Enablement Major Learning Outcomes: Attrition study, Data Visualization, Data Mining, Data Analysis, Brief Description of working environment, expectations from the company: Working environment is pretty good, and makes you feel comfortable Name: Sudhir Gupta (2015A1PS0575P)	2018- 19- sem1
Zinnov Management and Consulting,	1. Consolidation of Startup Database 2. India Startup Landscape Report 2018 Tool used (Development tools - H/w, S/w): Excel, Powerpoint Objectives of the project: Help Client understand Indian Startup Ecosystem Major Learning Outcomes: Startup functioning, focus area, technology focus, funding stages etc. Name: Shruti Verma (2014D2TS0973P)	2018- 19- sem1

Company	Experience	Year
Zinnov Management and Consulting,	Worked to enable corporate to engage and collaborate with start-ups to drive tangible and meaningful business impact, helped with the outreach of two GIC's Corporate Accelerator Programs, helped with the speed-dating process of corporate and start-ups, standardised the workflow of the Speed Dating process, worked with a client to conduct their hackathon and created out-reach presentation for sessions Tool used (Development tools - H/w, S/w): Microsoft Excel, Microsoft Powerpoint Objectives of the project: It was to help the client conduct a detailed analysis of Tech Start-up Landscape in India and to see where India stands in terms of Startup Ecosystem Major Learning Outcomes: Data Aggregation Data Curation Data Analysis Presentation Skills Brief Description of working environment, expectations from the company: The working environment of Zinnov is extremely supportive, helpful accommodating. Every doubt because of road blocks have been entertained with utmost patience and timely feedback to help the overall growth and efficiency was provided. Academic courses relevant to the project: Derivatives of Risk Management Ltd Gurgaon Tool used (Development tools - H/w, S/w): MS PowerPoint, MS Excel, MS Word Objectives of the project: Acquired a good market knowledge of Digital practices and Market Brief Description of working environment, expectations from the company: The word Zinnov is actually an amalgamation of 'zeal' & 'innovation'. To understand what kind of work Zinnov does, it is a mix of Gartner and McKinsey. Gurgaon station is a small team presently it has around 45 employees including interns. So I got to work here in small teams of 2-3 people which gave me a lot of exposure in its own way. The work is engaging here unlike big companies where you would do a little work some days. Gurgaon office offers consulting services in Digital Practices. It is more of research based work than front end consulting unlike most roles in PWC etc. It was however, a good learning experience none the less. I'm confident th	2018- 19- sem1
Zinnov Management Consultancy Pvt.	Extensive primary and secondary research to make professional presentations, white paper for clients.  Tool used (Development tools - H/w, S/w): MS Powerpoint, MS Excel, MS Word Objectives of the project:  To shortlist top 5 technology use cases in the Financial Services industry for the clients business. Major  Learning Outcomes: Gained the knowledge of Financial Services industry and that of the Retail industry.  Also learned making professional presentations. Brief Description of working environment, expectations from the company: Work environment is fine; could sometimes be a little harsh, depending on the Manager and the project. Academic courses relevant to the project: Fundamentals of Finance and Accounting Name: Saniya Dasot (2015A5PS0926P)	2018- 19- sem1
Zinnov Management Consultancy Pvt.	Worked on 4 client projects 1. Global IoT Security: Market Opportunity Assessment 2. Strategy to Accelerate Enterprise Digital Products in the Healthcare vertical 3. Setting up of a Global Development Center for a global Shipping company 4. India GIC Opportunity Analysis for RPA Tool used (Development tools - H/w, S/w): Microsoft Excel, PowerPoint Objectives of the project: 1. Identification of the available and addressable market size of IoT Security segment, deep dive across key verticals i.e. Energy/Utilities, Manufacturing, Auto, Smart Cities/Buildings, Retail and Healthcare and identification of current and future use cases 2. Helps the client in Industry Prioritization, Industry Use case analysis and subsequent opportunities, and developing a business plan and roadmap 3. Analysis of opportunities and threats in setting up of a Global Development Center in India 4. Identification and analysis of relevant GICs in the BPM space to target for automation specific opportunities Major Learning Outcomes: Analytical skills, Problem solving, Customer retention and success, Ability to take initiatives, Professionalism Details of Papers/patents: Brief Description of working environment, expectations from the company: Work environment is good. Zinnov follows an open door culture and the senior leadership is very approachable. Academic courses relevant to the project: Principles of Management, Principles of Economics Name: Neeraj (2015A2PS0654P)	2018- 19- sem1

Company	Experience	Year
Zinnov Management Consulting Pvt. Ltd (IT Project) ,	At Zinnov, I worked on developing the Draup platform, which is a subscription-based business intelligence platform designed to provide advice to people in the sales and HR departments of client firms. I worked as a Big Data Engineer and a Data Scientist, which was possible due to the flexibility offered by the firm in choosing my own projects. I was initially assigned to the ETL team (also called the Big Data team) where I worked on refining and consolidating data from various sources using Apache Spark. I later ended up working with the Data Science team on a project which combined the tasks of the two teams. I ended up learning a lot about how data processing is done in production environments on large databases, and how firms deal with the problems present in self-reported data. I also learned a lot about the various ways to remove junk from data obtained and how to obtain useful representations for use in machine learning models. I also had a project where I analyzed the ways in which Elasticsearch could be used as a data analytics tool. Tool used (Development tools - H/w, S/w): Remote distributed clusters, Apache Spark, HDFS, MongoDB, MySQL, Elasticsearch, Keras Objectives of the project: To deduplicate and validate certification data Major Learning Outcomes: CNNs for text processing, string preprocessing methods, similarity checks. Details of Papers/patents: Brief Description of working environment, expectations from the company: The company provides a very open and friendly working environment. You are encouraged to take up projects that you find to be interesting, and to take responsibility for their outcomes. There is very little in the way of instructional training, except for the initial period where you learn about the tech stack you will be using (mostly Spark). However, you can approach anyone at any time for help, and they will almost always try their utmost to assist you (even if they have important work on their hands at the time). The company is also very generous when it comes to working hour	2019 20- sem1
Zinnov Management Consulting Pvt. Ltd., , Bangalore	Deep dive analysis of the companies to provide strategic approach to the clients Tool used (Development tools - H/w, S/w): Excel, Powerpoint Objectives of the project: Strategic Consulting Major Learning Outcomes: Consulting and research Details of Papers/patents: Brief Description of working environment, expectations from the company: Zinnov is an excellent place to work in. Nice set of people with many valuable suggestions given Academic courses relevant to the project: None	2019- 20- sem1
Zinnov Management Consulting Pvt. Ltd., , Bangalore	As part of the Gap team at Zinnov, my work revolved around the three major reports published annually by them which were on Engineering Research and Development (ER&D); Internet of Things (IoT), and Media and Technology (M&T). These reports provide ratings and rankings of various Service Providers in different verticals and horizontals, based on various parameters like capabilities; expertise; achievements etc. It was a great experience working in Zinnov, being a part of such a helpful team and gaining exposure to the world of consulting. Tool used (Development tools - H/w, S/w): MS Office (Excel, Word and PowerPoint), Linkedin Recruiter Login and Naukri logins Objectives of the project: ENABLING THE GIC TO UNDERSTAND THE GOOD PRACTICES BEING FOLLOWED BY PEERS IN THE INDUSTRY TO MOVE AHEAD IN THE VALUE CHAIN & WALMART TECH TALENT BENCHMARKING. Major Learning Outcomes: Industry exposure and knowledge, Market research, Data Collection and analysis, Decision making. Details of Papers/patents: None Brief Description of working environment, expectations from the company: The company is comprised of experienced individuals who are very helpful, and are easily approachable as there is no hierarchy. Flexible hours and a very supportive team. Academic courses relevant to the project: Principal of Economics, Fundamental of Finance and Accounting, Business Analysis and Valuation.	2019- 20- sem1
Zinnov Management Consulting Pvt. Ltd., , Bangalore	Our team was involved in rating the Service Providers in different industries such as Automotive, Aerospace, BFSI, Software & Internet etc. globally. We used to asses all the SPs on different parameters, which helped us placing them in different zones like Leadership Zone, Nurture zone, etc. MY major work was related to finding the insights and data points through Primary and Secondary research. Secondary research like LinkedIn, Naukri.com, etc. Tool used (Development tools - H/w, S/w): MS-Excel, MS-PowerPoint, MS-Word, Objectives of the project: To rate various SPs globally in different verticals Major Learning Outcomes: My research skills were improved, learnt how to analyze the set of data in a meaningful way to find the trends of the market. Details of Papers/patents: Brief Description of working environment, expectations from the company: My experience was very good. Everyone follow a very enthusiastic approach which creates a very good environment to work in. At no point I felt that my questions would disturb anyone because everyone was so kind to give a good explanation to each of my question. The working environment is very good but I had one issue, the working hours are not fixed. Academic courses relevant to the project: POM, POE, Market Research Student	2019 <sup>-</sup> 20- sem1

Company	Experience	Year
Zinnov Management Consulting Pvt. Ltd., , Gurgaon	I was involved in numerous projects during my stay, all of which were directly used by the company as work for their paid projects. The company has a lot of work, so interns are directly involved in the project teams to gain maximum work. I worked on both, whitepapers and reports, as well as proper projects for companies doing compete and peer analysis of their market segment. Tool used (Development tools - H/w, S/w): Linkedin Sales Navigator, DRAUP, Microsoft Office Objectives of the project: The objectives of the projects were confidential, but in general they were about the knowledge of the AI market, and how the big and small players are working in the segement across the verticals Major Learning Outcomes: About the market of Digital technologies like AI, IoT, etc. Learnt presentation and report making, doing primary interactions. Details of Papers/patents: Brief Description of working environment, expectations from the company: The people environment is friendly. The gurgaon office focuses on digital technologies and its a new division for the company, so the environment is very much like a startup, where there is always too much work, and the more you volunteer to do, the more would be expected out of you. There is no distinction between employees and interns in the amount of work being done. They will happily offer ppo to someone who is interested and does decent work, and it might be a good place to work for exposure to responsibilities which might not be possible for many years in a bigger company. Academic courses relevant to the project: Market Research, Finance knowledge	2019- 20- sem1
Zoomcar India Pvt. Ltd., Bangalore	The work was majorly related to data analytics, where the analysis done was to increase the performance of various revenue generating models. Tools used (Development tools - H/w, S/w): SQL,Python,Excel Objectives of the project: Increase the efficiency and performance of revenue generating models Outcomes of the project: Increase in efficiency, Automation of report. Major Learning Outcomes: Analysis requires to learn the user behavior. Brief Description of working environment, expectations from the company: The working environment was quite good, being a startup we can ask help from all others.	2017- 18- sem1
Zynga Game Network India Pvt. Ltd., Bangalore	For the start, Zynga has been my first tryst with the corporate world and it was a lot different than I imagined it to be. As a college student, I never adhered to the timing and ways of getting work done, but here timing and procedures are the most important thing. Things I learned here at my PS was how to work with people as a team, a lone wolf can't and won't survive in these settings. And no matter how clueless you are on some topic or subjects, it is always good to shed the inhibitions and ask someone, it doesn't matter how small the doubt is. Increase in tolerance and handling frustrating situations calmly are also the major takeaways from PS. On the materialistic perspective I learned how to handle Servers, make flash animations and work with complicated databases. There is a great difference between academics and industry work, though tools and ways are same, in college all we care about is working on ideal laws and deliver best solution possible, while in industry all that matters is "getting things done" until it works well for everybody and doesn't break things. Before my PS, I never worked on such a large codebase where a small change needs hours of searching and alterations. This kind of experience is unimaginable in the college. This PS will definitely augment my future prospects as now I would be entering in the world with a firsthand experience. I think I am more prepared now, than I was, for tackling issues both single handedly and with a team. Also working in such a reputed company for more than 5 months is a statement in its own and will not be overlooked in my future ventures. I am delighted when I look back on my projects and their importance to the company and how they trusted a completely inexperienced person like me on these things. I worked on AWS migration which was backbone of the game and blob reduction which is one of the most ambitious project FarmVille team is working on. Also I was given the responsibility of being a release manager whose work is very important as every change in	2015- 16- sem1