

Data is not just a detailed record of what has happened; if interpreted correctly, it can provide a roadmap to all our future course of actions. It takes deep mathematical concepts and a sound understanding of computer algorithms as well as an innate business sense to extract valuable insights from data. Since childhood, I have always wanted to create purposeful information out of raw data, and my expertise and enthusiasm for the subject has fuelled my desire to learn and apply data science for solving real world problems. I believe that an opportunity to study Data Science from your university will equip me with the knowledge and skills required to pursue my career goals in this field and make myself a valuable candidate for large corporates.

As a high school student, I developed a keen interest in electrical and electronic systems, which motivated me to pursue an undergraduate course in Electrical and Electronics Engineering. During this period, I acquired a firm foundational understanding of Electrical Science, Electronics, Computer Science, and Advanced Mathematics. I also had the opportunity to perform experiments in Control Systems Laboratory and Power Engineering Laboratory, where I tested circuits designed in PC, practiced on a breadboard, and analyzed the behaviour of electronic circuits under various parameters.

Eager to apply my newly acquired knowledge and skills, I decided to undertake a project where I developed a sensor-less circuit for automatic supply of water for irrigation purposes, based on the level of moisture in the soil. Here, I was required to build a control system that would acquire information about moisture level of soil from various locations, and accordingly activate the sprinklers for a limited time. This ensured that soil attained the desired moisture levels based on the data that was collected and analyzed by the system. Through this project, I gained proficiency in the construction of circuits, and data collection and data processing procedures.

This project gave me confidence to proceed to a more complex project where I designed a circuit for an induction-based domestic heating technique. In this project, the challenge was to produce optimum heat with minimal consumption of electrical energy. I used the trial and error method to make several changes in the circuit based on the data collected and worked towards achieving the highest efficiency possible. This project reinforced my skills in circuit design and data analytics and greatly put my problem solving and critical analysis skills to use.

In order to put my technical training to practice, I participated in several internship opportunities during my undergraduate program. I completed a 40-day internship program where I worked with the world's largest NGO that conducts a Midday Meal Programme serving school lunches to millions of children across twelve states in India. During this period, I helped them work out routing logistics to enable swift delivery of mid day meals to various government schools. In the process of enabling easy and efficient delivery of meals to school children, I used Google Maps for mapping out checkpoints and identified routes that took lesser time and required travel over a shorter distance. I studied several routing algorithms such as the Ant Colony Optimization algorithm to determine compatibility and reliability of my proposed solution for the midday meal program.

I also got an opportunity to visit the Vizag Steel Plant, which is one of the largest steel manufacturing plants of India. During this industrial visit, I attended several workshops and acquired a deep understanding of processes through which steel is produced and transported safely to the field units. I was also required to compile my observations in the form of a report and this helped me understand the professional format and method of drafting a report.

After completion of my undergraduate course, I wanted to gain some experience in the industrial setting, and so I started working at Schneider Electric in the Customer Experience and Customer Relationship Management department. Here, I was primarily involved in maintenance and update of the company's technology systems by working on bugs and handling enhancement requests coming from the e-commerce website of our company. My work during this time gave me a chance to work with technologies like SQL and Java, and methods in Data Analytics. Using the techniques of data querying and analytics, I helped my company extract insightful information from call logs. During my period here, I have developed a strong skill set in Java programming, data querying and analytics, Genesys-CTI technology, log analysis, and debugging techniques.

Working in the area of data analytics has enabled me realize the enormous potential of Data Science in solving real life business problems. My interest and passion for Data Science has inspired me to research various data analytics techniques and develop my expertise in the field. I have learned Machine Learning through an online course offered by Stanford University on Coursera as well as worked on attaining functional expertise in Python and PluralSight. Based on my realization of my inclination towards Data Science, I feel that a formal post graduate level education in this field will help me pursue a career in data analytics. It will equip me with the skills and knowledge required to work as a Technical Data Analyst and then gradually work my way to become a Data Scientist. I believe that my work experience in a techno managerial position has helped me to inculcate leadership skills which are essential for attaining a responsible position in the field of Data Science. After fulfilling my career aspirations, I desire to use my expertise to solve the problems of excessive road traffic.

A postgraduate degree in Data Science from your University will help me achieve expertise in the subject and help me develop an industry-relevant skill set in this area. While I have worked hard to develop functional expertise in Data Science, I need formal post graduate level education in this area, as this will enable me to learn the subject from industry leading experts and acquire in-depth knowledge and skills that will enrich my proficiency thereby allowing me to pursue my chosen career goals. I am especially inclined to pursue my education from the Data Science department of your University, as it will give me an opportunity to work with accomplished faculty and students. This exposure will undoubtedly help me enhance my technical and managerial skill sets while giving me an opportunity to work in a multicultural environment.

Given my considerable practical experience in data collection and data management, I now look forward to achieving expert subject matter knowledge and practical understanding of concepts through your postgraduate program.