Right now, there is no escaping the fact that our businesses and industries are largely driven by data. The tools and techniques of Data Science have the ability to help businesses make important marketing decisions, forecast the probability of events, and in general benefit us in our personal and professional lives. My current projects at my workplace are largely based on working with data and performing extensive data analytics for my clients, and this has triggered my deep passion and curiosity for the subject. My understanding of the field has reached new heights through the use of elastic search, and I am sure that learning many more similar techniques will further improve my skills and knowledge of Data Science. As I have always been passionate about learning and exploring emerging technologies in data management, I believe that this field has a broad scope and far-reaching applications in the industry. Hence, a postgraduate degree in Data Science will be the perfect platform for me to hone my skills in this area and gain international exposure to the use of data-driven tools for businesses.

My keen interest in subjects like Electricity and Magnetism, and Semiconductor Devices throughout High School motivated me to pursue my undergraduate studies in Electronics and Electrical Engineering. During this period, I developed a deep interest in computer science-related tools and languages, and acquired proficiency in C and C++. I have come to believe that every programming language is essentially rooted in logic and algorithms, and so I strengthened my skills in building these as well. My understanding of APIs and their functions was enhanced too, and this proved extremely helpful in my subsequent projects.

My cumulative knowledge of electrical systems and computing technologies soon familiarized me with the innumerable possibilities of these fields in the real world, and to reinforce this understanding, I attended a training course on Programmable Logic Control (PLC) at Central Tool Room and Training Centre, Bhubaneshwar. Here, I specifically understood the logic that is implemented for specific real-time industrial applications and I studied the ladder logic program, which is the graphical language of PLC. I acquired hands-on experience in implementing PLC programming in the control of relays and motors, and understood the applications of PLC in industrial automation and control systems.

Next, I decided to undertake an internship at one of the major electricity providers of West Bengal, the Kolaghat Thermal Power Plant. Here, I had the opportunity to attend training classes as well as get involved in the daily operations of the plant. I learnt extensively about the end-to-end operations involved in the generation of thermal power including unloading and processing of coal, processing of the boiler unit to fire up the burner, conversion of heat produced into high pressured steam, use of this steam to rotate the turbines, and consequential generation of 3-phase electricity. As coal combustion was used as the source of energy for generating electricity, I learnt about the importance of using renewable sources of energy in order to promote conservation of our natural resources.

After this, I undertook an internship at Orissa Power Transmission Corporation Ltd, which is a government-funded transmission plant and is involved in power transmission in Orissa. This can be considered a continuation of my previous internship as I learnt how electricity is transmitted to different areas after its generation. Long-distance power transmission always leads to a significant amount of power loss and hence, electricity has to be subjected to certain transformations before its transmission. During this internship, I specifically learnt about transformers, its types, and its applications in power transmission. Apart from transformers, I also acquired knowledge about various insulators and gained an overview of the overall functioning of the substation.

Soon after completing my undergraduate studies, I felt more inclined to work in the industry in order to acquire relevant professional experience and to further my practical education in the field. Hence, I started working at Wipro Ltd, where I had the opportunity to work on three outstanding and educational projects. I started off with the Grameen Phone project for the client Grameen Phone Ltd, Bangladesh, where I worked as an SQL Developer for the development of reports using Oracle SQL-based queries. Apart from this, I also worked on the Oracle BPM tool where I became familiar with WebLogic Server, Oracle SQL database, and other web service components for integration. Additionally, I used the WebLogic Server for creating queues, Connection Factory and Data Source, and handling message service to and from JMS Queue. My first project in this company helped me gain a detailed understanding of databases, WebLogic Server, and Java. Within just one year of working in this company, I was awarded the TRB Shining Star Award for my phenomenal performance on my project.

After this, I moved on to the Telenor Myanmar Project, where I worked as a BPM Developer, using my core Java and database skills for performing overtime, travel, and other approval management processes. I integrated BPM processes with Utilities for the processing of Workstep and used PostGreSQL and Microsoft SQL for the development of reports. Apart from this, I developed scripts and Crontab configurations for daily operational tasks and performed admin tasks related to code deploy and Apache Server Start Stop along with other routine maintenance scripts. This project helped me work on my Unix programming skills and I was particularly appreciated for developing reports in both Microsoft SQL and PostGre SQL. I was also recognized for the development of overtime and travel management flow using the Newgen IBPS tool.

Based on my work on these two projects, I got promoted to the post of Senior Software Engineer with total responsibility of onsite operational leadership. In this role, I overlooked and managed support issues related to SLA breach, end-to-end proactive monitoring system along with integration of monitoring tools, automation of work areas for the optimization of support output, and other procedures for daily maintenance support activities. My major project during this period was the Digi Malaysia Project where I worked on various Oracle-based tools for providing support of existing codes for bugs reported by clients along with resolution of issues. I worked as an Admin in the debugging of server-related issues and the analysis of thread dump server Start and Shutdown processes. I have also played an important role in server upgradation with extensive analysis of available data. Through this project, I gained proficiency in the data visualization tool, Kibana, and Elastic Search API for the monitoring of deployed services performance. Apart from hardcore technical knowledge, I have been able to develop my time management and leadership skills, and I have been well appreciated for my proactive support in company projects.

Although I have completed my undergraduate studies in Electronics and Electrical Engineering, I have acquired extensive professional experience in a leading Information Technology company which has helped me evolve as a developer across various platforms. The best part about my job was that learning was a never-ending process and I was able to acquire in-depth knowledge of databases, Java, XML, Unix, and Server Admin activities. I was also able to appreciate the significance of data and the far-reaching applications of data management and data analytics. My main motive for pursuing Masters in Data Science is the opportunity I will get to evolve both technically and professionally as a strong contender in my field. I intend to learn as much as I can and become capable of landing a job in one of the technology giants of the world. I see myself leading a team of Data Scientists working towards the

success of my company, and also educating my team members about skills that I have learned through trial and error in my prior projects. I am particularly interested in applying the information obtained through data analytics in areas such as disaster management, so that future patterns in natural disasters can be predicted well before time and a lot of lives can be saved.

A postgraduate education in Computer Science from your University will serve as the perfect platform for me to hone my skills and expand my knowledge base in this field. I particularly intend to focus on the latest tools and technologies in Data Analytics so that I can offer the most up-to-date solutions to businesses for their data needs. I look forward to interacting with your educationally and culturally diverse student community in order to further acquire a global perspective of the applications of Data Science in present-day industries. I am aware of the quality of research that is regularly published from your University and I long to be a part of your skilled team of Data Scientists moving ahead in pursuit of innovative and useful data-driven solutions. I am confident that being guided by exceptionally talented faculty at your premises will help me gain a broader idea of the field and a successful direction for my future.

My extensive professional experience in Data Science has geared me for a technically challenging career and I hope to acquire further advanced knowledge of the subject through your postgraduate program.