**STATEMENT OF PURPOSE**

With technology advancing at a breakneck speed, and with a large amount of data amassed every second, data-driven decision-making has become the need of the hour. The enormous potential of harnessing data and the profound impact it can have on delivering intelligent insights is overwhelming. During my work experience at Tech Mahindra performing data analysis and reporting for clients, I was strongly attracted to Analytics after I fathomed its significance on the overall productivity of the organization. My inherent desire to learn about data analysis and its implications on business performance, coupled with a realization that data is essential to every decision taken towards business growth influenced my decision to pursue a Master’s degree in Data Science and Business Analytics.

During my undergraduate course in Electronics and Telecommunication Engineering, I was exposed to multiple programming languages like Java and C++ which built a strong programming foundation. I also got an opportunity to work on MATLAB for technical computing and data analysis. My final year project was titled “ZigBee based defense robot” which was aimed at developing a robotic vehicle using a ZigBee module and embedded microcontroller. My role was to assemble all the data needed to outline the blueprints of the project, to represent the methodology of the entire process using a flowchart and construct a program code using Python and embedded programming for the model and analyzing the developed program for any issues. Besides this, in order to explore my research proficiency, I also published 2 research papers during my Final Year. The first paper titled ‘Image Denoising Using Wavelet Transformation’ was published in International Journal of Engineering Research and Application (IJERA). This paper analyzed the data related to image properties to separate noise from the image using wavelet transformation. The second paper titled ‘Analytical Comparison of SDH and PDH’ was published in International Journal of Advanced Engineering and Research Development (IJAERD) and provided a comparison of two digital hierarchies in a telecommunication network.

Post my graduation, I joined Tech Mahindra Limited, a leading IT company in August 2015. Initially, I worked on data integration and analysis for Tech Mahindra clients such as Reliance Jio and NATCOM and my role was to analyze the raw data from the source and apply various transformations on the data using SQL and ETL tools and generating reports using Complex SQL Queries according to requirement. This firsthand experience made me realize how insightful and informative this vast amount of data can be to any organization. It also gave me an understanding of the various processes of business intelligence.

Later, I was given the role of a Business Analyst for Client Reliance Jio which provided me with an in-depth understanding of the different techniques to support business processes and improve performance. My work involved analyzing customer details such as data usage, call duration, region wise sim card sales, etc. and preparing reports and dashboards for business users. I extensively used data visualization tools such as Tableau for identifying customer trends and patterns. These roles have helped me comprehend the growing importance of statistics and analytics in driving managerial decision-making in today’s businesses. Getting hold of these tools provided me an out-of-the-box insight into behavioral analytics to enhance digital user end experience for customers and optimize their productivity. One professional assignment which highlighted my prowess at my firm was when my work for the client Reliance Jio enabled them to achieve complete automation of the system and resulted in full compliance to the regulatory reporting for FY 2017-18 with the highest accuracy among all telecom service providers.

In order to enhance my analytical skills, I have completed online certifications such as Google Analytics and Microsoft Certified Professional in Machine Learning and Data Analytics. I have also worked on several projects to explore the practical applications of machine learning. In one project, I predicted customer subscription to term deposit on the basis of bank’s marketing campaign by using the Random Forest Algorithm achieving a model accuracy of 92.3% whereas in another, I predicted segmentation of Hotstar users using XGBoost Model to identify watch patterns using customer demographic data and achieved a model accuracy of 82.6%. These projects have helped me in understanding the utility of data science and analytics in our daily operations as well as its growing impact on today’s businesses.

Apart from academics, I have shown equal enthusiasm towards co-curricular and extra-curricular activities too. I have participated in technical workshops for PCB Designing using Eagle software, Raspberry Pi using Python programming language and organized workshops as a member of IETE committee. I am also an active member of SWAMEE Association, an NGO working to provide free healthcare services to underprivileged people where I collected sponsorships and organized health-care drives. I believe my participation in these events has helped me develop my interpersonal skills and will aid me in the future.

With more than 3 years of work experience in IT sector, I believe I am now ready to pursue a master’s degree in Data Science and Business Analytics and would like to apply for this course at The University of North Carolina at Charlotte, to further gain valuable skills in order to catapult my career growth. Upon acquiring knowledge and expertise, I hope to move up the corporate ladder and become a successful Data Scientist in a worldwide enterprise. The program has courses like ‘Applied Machine Learning’ and ‘Business Intelligence and Analytics’ which are aligned with my interests and career goals. This amalgamation of academic excellence and diverse cultures has stimulated me to choose your esteemed university. With well-rounded academic achievements and diverse professional experiences, I am confident of excelling in my Master’s degree. Additionally, I hope to contribute to the interactive sessions in classrooms and the research enterprise at your university. On my part, I will bring my analytical skills combined with my technical aptitude to the university. Thus, I hope the admission committee sees merit in my application and grants me admission with maximum possible aid.