

As long as I can remember, I have been extremely passionate about technology and especially its use in business processes. Deriving inspiration from Elon Musk who extensively uses technology, I too want to make use of technologically advanced solutions for various real-world applications. I have spent my entire undergraduate period working on my technical skills and this learning process culminated in a Data Science and Analytics internship which strengthened my resolve to build and sustain a career in Business Analytics. Apart from my undergraduate curriculum, I enhanced my knowledge in tools used to handle a large amount of information and extract meaningful insights from data, and constantly tried to draw relationships between these tools and its applications in business. I specifically focused on machine learning models, data visualization, data preprocessing, and data modeling and these techniques helped me understand the technological revolution that has changed business approaches. In order to continue my journey in this field and to acquire advanced knowledge and skills, I wish to pursue a postgraduate education in Business Analytics.

Since childhood, I have been fascinated with technology and have tried to learn more through articles and in-person discussions. In order to explore this domain further, I pursued my undergraduate studies in Computer Science and Engineering at IIIT, Jabalpur. During this period, my favourite course was Database Management Systems through which I acquired in-depth understanding of databases and data storage, and how data can be viewed and extracted from the database. I also learned important and relevant technologies such as SQL and R that helped me in my academic and internship projects.

Excited about learning new and amazing technologies, I was eager to practically implement my knowledge and so, I decided to use natural language processing techniques and machine learning algorithms to develop a system which could detect if a news source was reporting fake news. For this, I performed a comparative analysis of machine learning models such as logistic regression, Naïve Bayes, Random Forest, and SVM and determined which model was the best fit for my system. As I kept going deeper into the project, I got the chance to learn several new concepts such as mistake identification in news articles, synonym identification, and various other concepts in machine learning, and I am sure that this learning will help me go a long way in my education and work projects in the future.

Wanting to enhance my software development skills, I volunteered for a large-scale project for my own college known as FusionIIIT, which is an Enterprise Resource Planning software comprising of 23 modules. Out of these, I was assigned the task to develop three modules – Leave Management, Placement Cell, and Mess Management modules, where I had to develop the platform as well as perform quality assurance checks. Apart from this, I also had to manage the database for these modules for which I developed a data warehouse comprising of all the required tables and a system for scheduling automated updates of entries. To ensure smooth updates, I connected the database with the frontend system using the Python framework, Django. Through this project, I acquired in-depth technical knowledge of databases and learned how to manage the data for accurate retrieval and extraction of useful information. As this was a huge undertaking for my college, the entire project had a team of 100 members working on it and being a part of this group of experts forced me to enhance my skills to meet their standards and develop a strong professional network with like-minded enthusiasts.

In order to further deepen my knowledge about machine learning and its applications for the benefit of the society, I undertook the development of a system which could recognize hand gestures of the visually challenged and translate them so that normal people can understand the meaning of these gestures. For this, I wrote the entire code using MATLAB and implemented thinning methods to recognize static hand gestures. This project helped me acquire experience in conducting an extensive literature review and writing a research paper reporting my work and results.

Interested in learning about the latest tools and methods used for business analytics in real-world companies, I decided to do an internship at a textile manufacturing company in Sri Lanka, where I performed procurement optimization and forecasting. Here, I gathered project requirements from Project Heads and Chief Analytics Officers, understood the business requirements of the company, and implemented ETL processes to fulfill these requirements. I also developed a data warehouse for the company which had all the information of sales and procurement saved appropriately. In order to make this data available for the business, I performed exploratory data analysis, both manually and with the help of PowerBI, performed data sanity checks, and troubleshooted issues with the database. Subsequently, I created an optimized model for procurement forecasting and developed a dashboard to enable procurement planning in the company. This experience enabled me to understand the data flow between different verticals, and acquire practical skills in data modeling and data visualization. As I directly interacted with the clients regarding the project requirements, I became directly accountable for my tasks and started working systematically to complete my work within deadlines.

Eager to acquire more hands-on technological experience at the grass roots level, I decided to work in a startup so that I could get overall exposure to different aspects of a business. Working for an FMCG manufacturing company, I performed beat optimization by implementing appropriate logic, created static beats, and improved the hit rate through data analysis and beat allocation for marketing representatives. My work on this route optimization project enabled me to become adept in technologies such as SAP HANA, clustering, and advanced SQL scripting. As this project utilized tools and technologies that were quite advanced, I acquired a lot of problem solving, critical thinking, and troubleshooting skills aside from gaining technical expertise.

Continuing my exploratory journey on the use of technologies for business purposes, I did an internship at a pharmaceutical company, where I performed freight cost estimation and pallet optimization to enhance the profits of the company. For this, I implemented a Python script for determining sizes of master cartons and the number of units that could fit in a master carton in order to estimate freight costs. I also optimized freight solutions for the company by determining master carton arrangements that could accommodate the maximum number of cartons in a single transport vehicle. This internship helped me develop my skills in Python scripting and enabled me to handle projects independently including tackle challenges, find solutions, and perform literature surveys.

Apart from my undergraduate coursework, I have been an active participant in various clubs and activities in my campus. I have served as a member of Shutterbox, a photography club in my college where I was involved in organizing a talent exhibition along with several other events to motivate

students to showcase their creativity. I have also been a part of the Marketing and Publicity team at my college while organizing a technical fest where I focused on acquiring sponsorships and inviting distinguished professionals for delivering lectures. These experiences gave me the much-needed exposure to influencing people using verbal and written communication skills, and working in a team to accomplish project objectives.

My internship experiences in particular have helped me acquire a deep passion for the use of technology in business and have motivated me to continue on my journey for gaining advanced analytics knowledge for using business data wisely. Hence, in order to acquire technical skills in the domain of data analytics and processing, I wish to pursue a postgraduate education in Business Analytics. After completing my higher studies, I would like to take up a position where I can work on my analytics skills thriving in an international business scenario. Eventually, I would like to take up a position in a product-based company such as Amazon or Apple where I can work with data deriving insights and contributing to further growth of the company.

In order to fulfill my goal of providing analytics services to businesses, I wish to take up a postgraduate program in Business Analytics at _____ University. The numerous research projects that I have worked on and the internships I have attended during my undergraduate period have given me a strong command over the concepts. I now wish to deepen my understanding of the field and become up-to-date with the most recent trends in the field of data processing and management. I intend to acquire a strong technical skill set by pursuing several exciting and challenging projects at your state-of-the-art research facilities. Being guided by accomplished faculty such as _____ and _____ at your premises will help me take my projects to the next level and acquire a more comprehensive understanding of the field.

My experiences in using my knowledge and skills for research projects in my field of interest have given me a strong knowledge of my subjects, and I am confident that my aptitude and passion for the field will help me stand out at your campus.