

While our predecessors created marvels of technology based on steam power, internal combustion, and complex mechanical systems, the current generation of humans has built powerful software which has made communication and transfer of information faster than ever. Today, computer science and software applications are at the core of every machine, including automobiles, fighter jets, as well as biometrically operated doors that are deployed in many offices and homes. Information technology and computer sciences have been the dominant technologies of the past two decades and pursuing these subjects as part of a postgraduate course will help me further my knowledge and expertise in this field.

I have always been fascinated with computers and I am keenly interested in learning and implementing new technologies. I look up to people like Bill Gates, Larry Page, and Steve Wozniak for their immense contributions to the field of computers and dream of being like them someday. Even before I joined my undergraduate program, I had learnt basic programming, web development, and application development. This strong background in computer science paved the way for me to pursue my undergraduate studies in Information Technology. Here, I worked on developing my skills in database management systems, web technology, microprocessing, mobile computing, and computer networks. I also went beyond my undergraduate coursework to learn about chatbots and ethical hacking. This knowledge provided a platform for me to think in terms of practical applications and use these concepts in my subsequent projects.

Once I had gained sufficient conceptual knowledge, I decided to strengthen it by taking up a project where I worked on a prototype of an instant messaging system. I developed this system using Visual Basic in Visual Studio. This project introduced me to basic programming of a messaging system and I learnt how to use the software, Visual Basic. After this project, I performed web scraping for information retrieval using the programming language, Python, and beautiful soap libraries. Here, I learnt how to use Python for programming and how to use a library to retrieve information from the web.

These projects gave me good exposure to programming and I felt confident to take up a project where I used the ERP application for online video conferencing. I used Javascript, JSP, and MYSQL to develop the application on the basis of the Waterfall model. This application records the agenda, description, and outcomes of each meeting with two or more organizations or within the same organization. Through this project, I have gained immense practical knowledge of software engineering, various programming languages, and the design and testing of applications. I have learnt how to use a combination of software to create a functional and practical design for a useful application.

Although I was quite satisfied with my theoretical and practical coursework and did my best to hone my skills in these areas, I was interested in exploring other related domains too. Hence, I completed a training on Web Development using PHP and MYSQL, where I learnt about applications of artificial intelligence and the use of Python for data extraction. I also completed a training on the ERP tool, SAP ABAP, which helped me in my online video conferencing project. These trainings gave me the much-needed exposure to areas such as artificial intelligence, and helped me learn more about Python and ERP tools. This knowledge also helped me understand my courses better and I was able to make use of these techniques in my projects.

As I was the only one in my class to have completed the extra training sessions, I shared my knowledge with my peers about artificial intelligence specifications, future aspects of

blockchain technology and artificial intelligence, and their impacts on general consumers. This led to lengthy discussions on the subject and I was able to understand the general perspective and opinions of the relevance of artificial intelligence technology in today's industries. I have also taken initiatives in participating in science exhibitions and hackathons conducted in my neighbourhood. These experiences have helped me diversify my knowledge base by finding out more about other fields and experiencing things at a more realistic level.

After completing my undergraduate studies, I wanted to experience working in the information technology industry and understanding its nuances, and so I started working at Accenture as a Developer. Initially, I worked in the Department for Work and Pension as a Siebel Developer, where I was responsible for handling problems, maintenance, delivery to the client, Siebel upgradation, and developing, designing, and testing applications.

After gaining experience in working with the software Siebel, I moved on to taking up small tasks in the field of artificial intelligence. Most of the ideas that I presented to my company directors are now in production and these include automation of incident management tool service using artificial intelligence, use of chatbots for several projects, and implementation of blockchain for Bank of England and DWP. I have also implemented blockchain clusters for maintenance of evidence for the Ireland Police Department. I used my proficiency in this area for conducting training sessions for my colleagues and juniors so as to enable increased productivity in our company.

My efforts in the domain of artificial intelligence were recognized and I got the opportunity of working as an Artificial Intelligence Engineer in the Artificial Intelligence Capability team. In this position, I developed FAQ systems on the basis of Azure for chatbots. I am currently working in the area of remote sensing where I am trying to integrate artificial intelligence with multispectral images to predict the water quality of lakes and rivers and to predict anomalies in the self-heating properties of coal to prevent fire in the coal stockpile. I am also trying to integrate multiple IoT devices such as sensors and multispectral cameras with artificial intelligence.

I believe I have come a long way from information technology to artificial intelligence and I have gained indispensable knowledge and skills in the process. I have learnt how to build applications and their maintenance procedures, various programming languages, database management, and applications of artificial intelligence. More importantly, I have understood how to use innovation to give a project a unique direction for obtaining the best possible outcome. As I have considerable experience in artificial intelligence and blockchain technologies, I look forward to working in research and development, and product development. In the future, I see myself working as a Research Scientist in an industry where I use machine learning and artificial intelligence to make manual laborious tasks easier. I want to work with highly experienced and skilled professionals in this field and push the limits of my imagination in order to come up with innovative solutions.

A postgraduate degree in Computer Science from your University will help me gain advanced knowledge and expertise in fields such as machine learning and artificial intelligence, and enable me to think innovatively and informatively about the possibilities in technology. I want to experience learning in your unique and progressive environment, and working in your advanced research facilities in order to widen my perspective about this field. I look forward to discussing my ideas with the professors at your University and finding out their opinions about various emerging technologies, so that I can learn from their immense knowledge and

experience. A specialization in Computer Science from your University will enable me to apply in top companies like Google and Tesla, where I can pursue research and contribute to future upcoming technologies in the field of artificial intelligence.

As I am mostly a self-learnt person in machine learning and artificial intelligence, I feel that I will be able to take advantage of the postgraduate program and contribute to research projects under your guidance.