

Statement of Purpose for Computer Science

The Internet of things and Artificial Intelligence are charting new paradigms in the world of information technology and as an ardent computer professional, I am passionate about exploring this vast domain and unleashing its immense potential. My inextricable interest in computers began in childhood itself when I got my personal desktop at the age of eight. Within a week, I had mastered the process of installation of the OS and its working, developing a deep connection, which only strengthened with time. It was a video presentation by Kevin Kelly on TED Talks that got me interested in AI. His assertion that Artificial intelligence could bring a second industrial revolution made me curious to delve deeper into the incredible power and possibilities that lie within this challenging field. It is in continuation of my academic journey that I now apply for this innovative **Masters of Science in Computers** at your acclaimed university.

Always inquisitive by nature, I naturally opted for Science in high school. A good ranking in the entrance examinations saw me get admission in the prestigious Indus Institute Technology and Engineering for a B.Tech Degree with a specialization in Computers Science. College laid a firm foundation of Data Structures and Algorithms, Computer Networking System and Operating Systems, Data Mining and Warehousing, java, Python, and an introduction to Artificial Intelligence through soft computing. However, it was coding and projects which enthralled and captivated me. I delved into a series of numerous mandatory and creative projects which not only made my under graduation exciting and experiential but also nurtured my passion for coding. In my fifth semester, I worked as a frontend developer to build a Static website (Portfolio) using the Html/CSS/bootstrap/JS frontend. My next project was to build a dynamic website for 'SIA-Shah Investment Adviser' wherein I used PHP and Html/CSS/bootstrap/JS. The website provided complete details about the company along with their plans and the feature of Dynamic Contact Form & News-letter. My project on 'Virtual Student Information Desktop Application' helped me to concretize the knowledge of algorithms and data structures, the basic building blocks for solving any problem. The desktop-based application used Swing, Java, SQL Lite DBMS to manage student data. The immense satisfaction of building and maintaining a whole application on my own has been a transformative learning experience. These projects not only helped me to test and hone my programming skills, they also taught me valuable life-skills of discipline, timemanagement and working in a team.

To gain real-world experience I have taken the opportunity to intern at various companies, from a web designer internship in Silverwing Technologies to a Machine Learning Intern at InfoHub Software along with a stint at Internshala, where I worked as Student Partner learning about management and other soft-skills. Interning at these companies has given me the confidence and abilities to work in the industry gaining expertise in cutting-edge technologies like advance Javaframe works, swing, XML, Jdbc. As a Machine Learning intern in Infohub Software I was fortunate to work on various machine learning algorithms for training a regression model and also performed

classification and prediction. At Silverwing, I honed my programming skills in web development using the bootstrap framework along with project deployment. My biggest take away from the internships has been the opportunity for experiential learning, testing my programming skills and



learning the ropes of Project management. I have also been selected at ConvergeSol Ltd. as a .NET intern for the next 6 months. To prepare for graduate studies, I have also undertaken a Machine Learning Certificate course from Stanford University through Coursera in which I have secured a high 95.3 percent.

As my B.Tech program nears its culmination, I realize that I still need to learn a great deal about different aspects of computer science, which can only be fulfilled through a graduate program. My internship experience has given me first-hand exposure to real world programming and I now wish to explore the immense possibilities in IT through Machine Learning and Artificial Intelligence for Robotics. In the short-term, my career goals encompass working on cutting-edge technology in IT giants like Apple, Microsoft and Google. My long-term vision is to start my own start-up IT venture, leaving my own imprint on the technological landscape. Thus, an MS from University of Ottawa will provide the necessary skills and impetus to leverage my career in the right direction.

University of Ottawa is one of the foremost Canadian Universities offering cutting-edge technological studies especially in Artificial Intelligence and Computer Science. Laying a premium on learning and innovation, the university is a trailblazer in the computational domain, recognized for its excellence in IT education and applied research. I am positive that the state of-the-art learning and research facilities, and guidance from expert faculty will help me accelerate and consolidate my knowledge domain. The university's strong industry network and career development initiatives are testimony to its commitment to grooming students into market–ready professionals empowered to take on global challenges.

I would also like to add that I have always pursued my co-curricular interests with the same zeal as academics. I was actively involved in various events during my school and college days winning many awards in sports and performing arts (singing). I have also performed in radio station 'Akashwani' and have been an active participant and member of the organizing committee of various college events like SAUHARD 2K21 etc. I also participated in a workshop by "TechDefence", Ujala University and got an ethical hacking expert (level 1.0 and 2.0) Certification. Working for the community has been an integral part of my life as I have been actively involved with various NGO working as a co-coordinator for upliftment of the underprivileged. I have also been hosting a personal blog on technical news on WordPress and was selected in Google India challenge scholarship for android development by Udacity. Thus, I hope to continue the same in University of Ottawa and add to the cultural and social fabric of the college community with my experience and enthusiasm via various groups such as Greek Life.

My interests lie beyond the application of existing concepts and the boundaries of engineering, and I look forward to transcending borders and meet an equally passionate

set of students, enhance critical-thinking skills and gain a global education. Computer Science is a multidisciplinary field and at University of Ottawa, I wish to further my erudition in IT and its applications through your immersive Master's Program.