STATEMENT OF PURPOSE

Education is the most powerful weapon which you can use to change the world

~ Nelson Mandela

These words were printed on a poster in my school corridor. I never actually understood the meaning of it until I started my high school studies. I had opted 2 optional subjects for computer studies - software programming & electronics. What had started as a mere interest in computers evolved into an ambitious pursuit for more knowledge. The sheer vastness of the field blew my mind off. As I learned more about computers, I observed how Computers made our life easy, influenced our behaviour and became a way of everyday life.

My passion for computers grew exponentially and this led to a score of 95% in the computer science course in my high school. Hence, I opted computer engineering for my undergrad studies. In my undergrad studies, we had a subject - Design and analysis of algorithms, in which we learnt about machine learning algorithms and AI. While working on a paper, I came across the "Sixth sense technology" which was a combination of AI and Virtual reality. In my research, I came to know about the various prediction algorithms and how they can be used in various segments of healthcare or even in a game of chess. Another fascinating concept I came across during my research at the Computer lab under Prof. Deepak Kumar Gupta, was the "Alan Turing test", this mesmerized me. To rate a machine on its capability of understanding a given situation or predicting an outcome, was a very new concept. I was so intrigued by how a set of Algorithms can make a machine have its own thinking and problem-solving abilities, that it led me to decide to pursue my Master's Degree in ML and AI.

Since childhood, I have been academically inclined and an enthusiastic learner. In my undergraduate studies, I ranked 1st in the department of Computer engineering of almost 100 students and managed to score distinction in every semester. Blessed with excellent communication skills, I also got the opportunity from my professors to teach some topics such as data algorithms, java programming basics, OOPs concepts etc. to my juniors. For my final year project, I along with my team created a "Pervasive and Personalized Smart Health-Care System (PPSHS)", a smart architecture for automatic monitoring and tracking of patient's personnel, and biomedical conditions within hospitals and nursing institutes. I was responsible for designing and implementing the machine learning module which predicted the health conditions of a patient. This module took the patient's health parameters like blood pressure, temperature, history of medical conditions etc. The module also had a feature where it alerted the doctor immediately through the mobile app in case of any emergencies. We also published a paper on our project in the IERJ - INTERNATIONAL EDUCATION AND RESEARCH JOURNAL. I, along with my team, also had the opportunity to present our paper in the esteemed WRFER INTERNATIONAL CONFERENCE. I invite you, to please visit my research papers which are

available at http://ierj.in/journal/index.php/ierj/article/view/574/544 and http://www.digitalxplore.org/proceeding.php?pid=302

After finishing my undergrad I was a part of the computer industry for 2 years. I had started working as a java developer in Capco Technologies, India and my first project was the SCBLife Easy App project - a mobile app which will enable their customers to easily browse through their policies and get information on new ones. I was part of the backend team which focused on creating web services. My understanding of machine learning was useful here as I was responsible for developing a very complicated service – the Predictive casual analytics - which calculated the best policy for a user by taking into account his salary, past policies details and his credit score. My career truly took a turn for better when I got my first onsite opportunity in Capco. In spite of being an inexperienced candidate, I was chosen to not only visit the client but to co-ordinate and work with their team in a war room setup. In the war room I single-handedly solved many complicated issues involving the integration of our services and also provided solutions to client to improve the efficiency of their system.

I was also the part of the research and development team for 5 months in my company. During that period, I learnt many new technologies and approaches like backbase framework, Agile methodologies etc. Being a vivacious reader, I have read many science journals wherein I learnt about deep learning and neural networks. One of the papers I read that moved me was based on the Project maven – a research for risk management in AI. The writer talks about how model risk management is crucial for AI augmentation and also introduced a Knowledge management framework as a solution. This got me to think about how much I'm interested in the research field and how I would like to be a part of such a research institute. Hence, I decided that, I would also pursue a PhD which will give me the right opportunity for achieving my goals.

Since two years of working for Capco, I have learnt many new things, both at personal and professional levels. On a personal level, I have been able to understand and improve emotionally, financially, as well as socially. Professionally, I have grown to become a proficient and competent resource for my company and I was able to apply my comprehensive knowledge wherever it was demanded at work. I have an understanding of how the computer industry works and have used innovative and pragmatic thinking to exploit data and create unique solutions for my clients.

That being said, I am a creative and people-oriented Computer Engineer, with a love for new challenges and opportunities. While my main motive for Master's Program is to understand deeper levels of AI, my goal is also to be part of a team which provides worthwhile, efficient and useful Software Solutions for consumers all around. This program will provide me the right path to excel and endure in this ever evolving world of Machine learning and AI. Thus, I request the Admission committee to consider my application and provide me the breakthrough I need, to set my career on the path of growth and enrichment.