

An urge to dream and to chase these dreams, all happens with a devoted heart and mind. Right from my childhood, when I started understanding the things around me, I found myself in science wonderland. With my tiny understanding and curiosity satiated by my parents and elders of the family, I learnt that progress in science was due to advancement of technology in different shapes and modes. My childlike beliefs prompted me to nurture a dream of creating new things. I have been interested in computers since an early age and my passion to do something in the field of Artificial Intelligence and Machine Learning has been strongly nurtured during my academics and professional experiences. My aim is to begin my own entrepreneurial venture in product development using Artificial Intelligence, and a postgraduate degree in ____ from your University will help me take the first step towards this future.

Sliding images on desktop using marquee tags might seem trivial, but it was enough to spark a “how” in me. This happened when I was 13 years old looking at my elder brother working on his HTML project. In order to satiate my curiosity about the applications of computers, I chose to pursue my bachelor’s in Computer Science and Engineering. During this period, I familiarized myself with concepts in Data Structures, Theory of Computation, Design, and Analysis of Algorithms, Artificial Intelligence, and Object Oriented Programming with C++. I particularly enjoyed my laboratory courses where I learned about Data Structures, Design, and Analysis of Algorithms, and Artificial Intelligence.

During the course of the undergraduate program, I undertook several projects where I had the opportunity to apply the theoretical and practical concepts that I had learned. Eager to gain practical experience in machine learning, I attempted the classification of wine quality using support vector machines (SVM) implemented in MATLAB. This project introduced me to a number of machine learning techniques and left me hungry for more. I, then, proceeded to my next project which was based on the detection of explosives using an electronic nose. I completed this project at Central Scientific Instruments Organization (CSIO), Chandigarh, under the supervision of a scientist. This project was based on Deep Learning, where I learned to work with Arduino microcontrollers and TensorFlow. I also completed a project in cryptography, where I implemented certain concepts of cryptography in cloud computing. I completed another project on an online stock exchange platform called Stock Beta, where I tried to emulate real-time stock exchange using PHP and Ajax.

So far, I have presented two papers at the national and international conferences, based on the projects that I completed during my bachelor’s. A paper titled, “Wine Quality Classification Implementing Support Vector Machines” was presented at the International Conference on Inventive Computational Technology - 2018, an IEEE sponsored conference. I also presented another paper titled, "Cryptographic Techniques in Cloud Computing" at the National Workshop on Cryptology held at JNNCE, organized by the Cryptology Research Society of India (CRSI). These experiences helped me systematically organize my project objectives and results and effectively communicate them to the audience. I also had an opportunity to meet other like-minded people, from whom I learned a lot about current trends in the industry.

In addition to the projects, I have also attended two summer internships in order to understand the practical uses of computer applications and programs that I had learned theoretically in my undergraduate studies. During my first summer training, I worked at HCL-CDC, where I received hands-on experience in the field of web development. In my subsequent

internship, I worked as a junior PHP developer, during which I happened to learn about the various PHP frameworks that are used in the industry, including their specific applications.

Apart from academics, I have been involved in a number of extracurricular activities, which helped me evolve as a complete personality. I have successfully organized and coordinated various events in my college, such as events in the cultural and technical festivals conducted annually. I was a member of my college quiz club, and so I participated and conducted several quiz competitions in my college. I have also played U-16 Cricket at the district level.

I was well charged after my bachelor's and was eager to gain some professional experience in the field of machine learning. Hence, I started working at 25 Technoarts, initially as a PHP Developer. This is a service-based company and so, I had the opportunity of working on a number of related ongoing projects. After this experience, I moved on to working at Aptech Computer Education, where I am currently working as a Project Trainer / Faculty. My responsibilities include teaching courses such as Web Development, C/C++, and basics of Machine Learning with Python. This has helped me brush up my concepts in web development and machine learning, and I have been able to keep up with the latest technology trends in these fields.

As much as I enjoy teaching machine learning in my current position, I want to gain more knowledge in Artificial Intelligence and be a part of cutting edge research going on in the field of Machine learning and its applications. I want to actively get involved in research and contribute to future technological advancements in this field. I believe I will be able to achieve this by working in the research and development department in a product-based company. I want to work towards building a stronghold in my domain and be a part of the development of groundbreaking technology. In the future, I also dream of starting my own company, where I attempt to create artificial intelligence-based solutions for problems in various sectors.

Having completed my Bachelor's in Computer Engineering, and gained professional experience in the field of Machine Learning, I now look forward to exploring other outlets for my knowledge, especially in research and product development. Pursuing a Master's in Machine Learning and Artificial Intelligence from your University will help me gain sufficient theoretical and practical knowledge to be able to come up with innovative ideas for implementation in this field. I look forward to working with well-established professionals at your advanced facilities and interacting with my peers from different educational backgrounds, in order to improve my skill set and expertise in my chosen field. The knowledge base that I will gain from my Master's will act as a solid foundation for the execution of my future projects.

Given my passion and experience in the field of Machine Learning, I feel prepared to take up more challenges and learn about the latest developments in the field, both theoretically as well as practically.