

Being a science fiction enthusiast right from my childhood days, reading Isaac Asimov's 'I, Robot' sparked an inquisitive thought in my young mind for the very first time - "Are we really capable of developing intelligence on par with the holistic nature of humans?"

This presumption of my optimistic mind was the seed to my passion. Like the entangled strands of DNA, this conception crossed my desired career path at periodic intervals making me rethink and take decisions on how I should pursue my dream. The first instance reflecting this was persuading my parents into buying a personal computer. I felt elated looking at the power of a simple basic computational code written by me, running on a machine with 512MB RAM, giving answers to complex mathematical calculations in fraction of seconds. Excelling in academics resulted in securing a gold medal with a 10/10 CGPA - in X standard examination conducted by the Central Board of Secondary Education with unexpected invitation from the Indian Space Research Organisation([ISRO](#)) to participate in GSLV competition. Visit to this world-famous rocket launching facility had a long lasting impact, strengthening my conviction to be an enthusiastic student of science and technology.

My performance during the 11th and 12th standards made me to be one among the top 10 of my state. I cleared IIT Joint entrance examination and got admission in the [National Institute of Technology, Warangal](#) . Due thought into the choice of branches based on my rank and interest made me forfeit my admission into other elite institutes such as IIT and BITS to pursue Electrical and Electronics Engineering at [NIT Warangal](#) which possessed renowned and well esteemed professors with significant research expertise in artificial intelligence, neural networks and their implementation in electrical engineering. Moreover, the interest to explore and understand the source of power which makes all the technologies function, without which they become redundant, also made me choose EEE.

While pursuing my undergraduate studies, few courses which played a significant role in sustaining my childhood passion towards Computer Science were Problem Solving with Computer Programming, Data Structures and Algorithms, Microprocessors and Applications. The final year elective namely "Artificial Intelligence Techniques in Electrical Engineering" gave me foundational knowledge in the field of AI - functioning and designing of artificial neural networks and developing efficient models using them. My final year project, a MATLAB simulation of an enhanced model of dual side speed-controlled inverter system used in wind turbines for increased efficiency paved a way to program, work on enhancing an existing model by running simulations and calculating values that would result in a better design.

My performance in the multilayer screening tests for filtering many aspirants made me one among very few who have been chosen by [Fidelity Investments](#) as software engineers. I got an opportunity to fondle my passion by taking up full-stack development and testing, with primary focus on the web and mobile applications. I played a key role in developing a client management system as a web application, and also an entire end to end pipeline for automating the generation of reports from raw data related to periodic training programs attended by around 8000 employees. It significantly brought down the time taken for the report generation from 50 hours a month to less than a minute. Since optimisation and enhancement are opportunities to progress, I availed the opportunity to redesign a native iOS application of significant business value crippled with many issues, as a web application. The rectified Prototype built as a proof of concept has been deployed into production and the same secured me 3rd place in an innovation challenge conducted by our company. Another initiative taken by me was to explore automation of an internal helpline chat using neural networks and lifelong learning concept. My extra-professional ideas always made me realise the boundaries restricting me. My daily commutes to the workplace

and the traffic troubles made me ideate how signals could be automated using cameras, processors and code utilising computer vision and the hardware. I embarked on a personal side project passionately, but wasn't able to come up with a really efficient model due to lack of resources and time for the necessary research. I started working on another project after a discussion with my dad to screen various animal images using Convolutional Neural Networks showing conformation details helping the vets identify superior animals. A Stanford [research paper](#) on detecting dog breeds using CNN that I read helped me realise that a Master's degree in US Universities with advanced technologies and expertise in the form of experienced professors, would provide me a platform to learn, research as well to implement the ideas I am eager to show the world in the form of outputs. This was when I decided that time has come for me to take a professional break to pursue an MS in computer science that too right when my desire to learn, research and explore is at its zenith. The Master's course from a world-renowned institute in an academically challenging environment would aid in the fulfilment of my goal of attaining required expertise in the field of Artificial Intelligence to contribute to the society.

I strongly feel that my dream to learn, research, explore and implement can be realized if secured admission in Texas A&M University, a world-renowned institute for the course of MS in Computer Science with its esteemed faculty and the state-of-the-art research laboratories. Research work carried out by "Prof. YoonsuckChoe" and "Prof. Dezheng Song" in the areas of Neural Intelligence and Computer Vision would be the best fit I could ask for as they match my intended areas of research to the closest.