**STATEMENT OF PURPOSE**

Electrical and Computer Engineering is at the heart of the most current technological breakthroughs. Any device with an energy or IT component is derived from ECE knowledge. Right from providing accurate medical diagnoses at a distance to exploring distant planets, ECE plays a crucial role. This dependency on ECE motivated me to pick this department.Since childhood, I always had the urge to know what was inside my toys and gadgets and how it worked. The mysteries amazed me as my romance with technology grew stronger day by day. My strong inclination towards Mathematics and Sciencesmade me go for engineering to calm my thirstonly to realize that what I have learnt are just a few drops in an enormous ocean of knowledge. My decision to pursue Master’s and later Doctorate is a natural consequence of my desire to gain as much knowledge as possible in my field of interest andhelp myself to be able to achieve and put my wildest dream to life.

I obtained admission at Government Sri Krishnarajendra Silver Jubilee Technological Institute (SKSJTI),Bengaluru, where I pursued my Bachelors of Engineering with a specialization in Electronics and Communication Engineering. The core coursesincluded Analog Electronics, Microprocessors, Digital Systems Design, Digital Signal Processing, VLSI, Analog and Digital Communication and Antennas have given me a good understanding of the theoretical knowledge.The corresponding practical classes have equipped me with abundant practical experience. I consistently maintained a First Class with Distinction in almost all the semesters and realized that it was more important to gain a thorough knowledge of my subjects and kept in touch with all the new discoveries by reading various magazines such as Electrical India, Data Quest, Electronics For You and these have helped me keep abreast of the latest developments in technology. I have also attended various seminars and workshops such as Sixth sense, Object detection using yolo at IISc(Bengaluru), and IOT workshop conducted in my college by BITES.

The seminar I attended on 5G conducted by Nokia and the training I attended of the Sixth Sensetechnology (the wearable gestural interface that augments the physical world) conducted by Technophilia Systems (2015) have drawn my interest. I have also participatedin numeroustrainingand I have taken courses on IoT, Java, Cadence and Python programming.

I have presented many paperssuchasChannelModeling of Underwater Acoustic Communication,Vehicle Detection using Simplified Fast R-CNN, Audio Spotlight, and Image Fast Template Matching Algorithm Based onProjection and Sequential Similarity Detecting on the Performance of AOA EstimationAlgorithms in Cognitive Radio Networks. I have also done many projects throughout my engineering, few of them are Intelligent Driver Assistance, Gear Display System in Bikes, Conversion of Non-touch screen to Touchscreen using Wearable Gestural Interface,Image Detection and Alerting. For each and every project, I chose a new technology and that was how I improved my skill set to work on multiple projects which gave me a wide knowledge on the real-time problems.

I have presented five seminars and participated in six coding challenges, technology games and Hackathons together. Wherein three of them were conducted by the CS department,one by the ECE department, the coding challenge was conducted by Technophilia and the hackathon by AWS.The notable ones are the e-Yantra which conducted by IIT-Bombay. Though I have worked on many projects, one of my favourites is the Geofence creation for child monitoring whose main goal was to

enable the parent to create/draw a fence on the map and help the parent to activate and monitor the kid’s location in real-time. I worked on the front end, database creation, and real-time monitoring of the system. This was a deep-learning project, where our team of eight had to train our own model and enable it in detecting the trucks entering and leaving the ports. It wasThrough this project, I learnt how deep-learning works from end-to-end and also to write algorithms to help the system detect the objects in the ROI.

I have a work experience of one year and three months from working on multiple projects.When I worked at Adisys(R&D)Pvt. Ltd. I was involved in Image Processing, i.e., enhancing the image using Machine Learningand object detection using deep learning. In this, a team of eight had to train the system on our dataset and help the system recognise the number of trucks entering and leaving the port. As a part of this project, I was responsible for object identification by processing the image in the region of intrest. I have also worked on the genetic algorithm.

I am currently working at SASKEN Technologies Pvt. Ltd., a company that provides Product Engineering and Digital Transformation services. Here,Iam working as a Software Engineer in the Digital R&D on an internalprojectthatdemandsa lot of coding, and proof of concept work. Working on this project has let me understand all the protocols and other documentation, patterns that the market expects from a developer.

The UC Riverside is ranked one of the best in terms of research and the courses it offers. The courses match my field of interest and the research conducted by Hyoseung Kim has matched my ideas and it also correlates with my final year project .The research work that is happening at the university and the highly trained and research-oriented faculty would enable me to quench the thirst for knowledge in a more easy way. especially the work of Hyoseung Kim is by far matching what I have dreamt to excel in.I was interested in Electrical and Computer Engineering, and the controls and robotics, enabling robots to better perceive and operate in variable and uncertain real-world environments.I would also like to work under Susan Hackwood who has the expertise in computer vision, 3D modeling and image processing.

My immediate goals happen to work as a …. for an organization of international repute.This will not only help me apply the knowledge I have accrued but also help me get a much more globalised perspective. Professional recognition and fame though not of paramount importance to me is something which I feel would be a logical fall out to.My long-term career objective is to leave a legacy as a …..that will live on after mewherein I want to make a name for myself and a good reputation that people will remember me even after I leave that company.

I hope that a graduate study at your university will be the most logical extension of my academic pursuits. It would be a stepping-stone to higher echelons in academic researches that I intend to pursue. If given the admission, I shall persistently strive to do your institution proud.