Name : **MAREDDY BALACHANDER REDDY**

Semester Solicit : **SPRING 2020**

STATEMENT OF PURPOSE
MS – COMPUTER SCIENCE

"Do not follow where the path may lead, go instead where there is no path and leave a trail." I strongly believe in these words and every act of mine does possess a unique quality, striving for something new respecting the conventional methods.

I, MAREDDY BALACHANDER REDDY, completed the Bachelor of Technology program in Electronics and Communication Engineering at CVR College of Engineering (An UGC Autonomous Institution). The ensuring statement of purpose is meant to put forth my aspiration to pursue my career through **Masters in Computer Science** at your esteemed university. I want to attain highest level of education and transcend new scope of research.

Being born in the 90's and witnessing the rapid advancements in the field of science and technology had always intrigued me as a child. This generated a great interest to pursue my higher studies in the field of Electronics and Computers from childhood. This field involves delving deep into the concepts of Mathematics and Science so that they can be applied to the real world problems and I scored (10/10) GPA in these subjects, in 10th class board exam and subsequently opted for Mathematics and Physical science at Intermediate level and later secured an engineering seat in one of the reputed colleges in Hyderabad, for my undergraduate program in Electronics and Communication Engineering.

As an undergraduate in Electronics and Communication, throughout the course of four years, I have been exposed to various subjects like **Pulse and Digital circuits, Integrated circuits, Electronic circuit analysis, Micro processors & Micro controllers, Analog & Digital communication, Antennas and Wave propagation, Optical communication etc.,** Apart from these I also studied computer related subjects corresponding to **Computer Organization and Architecture, Programming through C, Data Structures** and also possessed great knowledge on topics like **Web designing** and **Operating Systems** in **IT LAB.**

Apart from the theoretical understanding, I developed keen knowledge on software's such as **MASM, KEIL, Xilinx ISE, MATLAB** and **Android Studio**. Having worked on different platform which include **Arduino, Raspberry pi,** and **BeagleBone Black**, I learned many computer programming languages like **Embedded C, Java, Python, HTML, CSS** and also hardware programming language **Verilog**.

I always tried to apply the concepts learnt to develop many real time projects which boosted my interest in Computer Science and Electronics fields in the practice. They include **'Automatic linear adjustable podium'**, which aims at developing a modern electronic autonomous podium that can vary its linear parameters (5 ft. to 7 ft.) according to the speaker's height. **'Project KISAN – using DTMT Technology'**, this project aimed at developing a real time working model in rural areas to supplement the typical Indian farmer works. **'Project VISION – using OCR techniques and Text to Speech engine'**, this project is mounted around forehead of a blind person to aid him/her, by reading out different data such as title of product, articles,

information on any identity card etc., in front of him. This project is also been developed as an Android App.

Apart from the above mentioned projects I also worked on **UAV's (Unmanned Aerial Vehicles)**. I developed different types of drones both Quad and Hexa Copters using different types of flight controllers like **KK 2.1.5, NAZA M LITE** and **NAZA V2.** I mainly worked on measurement and control of Pitch-Roll and orientation of the copter.

In my undergraduate program I did two internships, one in **EmbeddedRF Technologies,** a private organization which works on Cutting-edge Technologies wherein I develop two projects titled **"Sign to Speech Conversion using Flex sensors"** and **"IoT based Home Automation using Google Assistant"**. And other in **CDAC (Centre for Development of Advance Computing),** a Scientific Society of the Ministry of Electronics and Information Technology, Government of India**.** Here during my internship period, I **analyzed URL Recorder code pertaining to QAF tool** developed by CDAC Hyderabad and gave a brief presentation on **HTML 5.2 specification features in web technology**.

In addition to the academics, I participated two times in **ATMOS** (The National Techo – Management festival of BITS Pilani Hyderabad Campus) to demonstrate my projects. I secured third prize in a competition in the field of Robotics organized by **RoboKart** an ISO certified company along with **IIT Bombay Innovation Cell**. I'm the student volunteer for **SMART INDIA HACKATHON 2017 and 2018** hosted by Central Government of India. In my final year of under graduation I'm chosen as the **'PRESIDENT'** of 'TECHNOLITES', which is a major association in our college which organizes many events like Guest Lectures, Workshops and Fests. Apart from this, I started my own private organization 'BOTX' (www.botxedu.org) with a team and we mainly deal in training students on areas like Embedded project development, Image processing, Web designing, Android application development etc., and successfully trained over 130+ students in the span of an year.

I choose the United States of America, for my higher studies because it is the leading hub for high-tech innovations and scientific development and USA is well known for the quality education system, which will guide me a great deal in enhancement of achieving my dream of obtaining a respectable position in professional field. I believe that the essence of university education lies in the synergetic relation between students, professors, and the department. A

careful study of the website of **Arkansas State University** gave me ample amount of knowledge about the courses, department laboratory, research opportunities, and achievements of graduate students. I am confident that if given an opportunity, I can contribute to the ongoing work in your graduate program in a productive manner. As an international student staying more than 8000 miles away from homeland, pursuing Master's in the United States provides both a Conducive and Challenging environment that makes me a much stronger and an extremely independent person.

I take this opportunity to thank you for enabling me to express myself. I believe your graduate research program helps me in developing new skills and achieve my career goals. I hope to receive your offer of admission for the MS in your University.

- **MAREDDY BALACHANDER REDDY**