**“To build castles in the air is not wrong. All we need is the foundation under them”**

Who would have thought in the earlier days that you could tell your oven to cook and then stop automatically after 10 minutes, or that you could have computers that were the size of your palm, or that accessing a person on the other side of the globe was a possibility? Thanks to technological innovations in Electronics, all these are a reality today. Current and emerging technologies in this area concentrate on improving the quality of life in today’s society. Today, almost everything from fighter jets to elevators or from computers to digital watches is electronic based. From the computers & technologies that make the Internet possible, to the cell-phones, satellites and GPS that provide wireless communication, the global village is developing using products largely based on the principles of Electrical Engineering. Ever since high school, it has been my dream to pursue higher education at a world class university and the dream is close to becoming a reality.

Throughout my life, I have been academically oriented. I have always been in the top 5% of my class, be it in high school, Pre University or under-graduation. I have never found studies arduous. Academics come naturally to me. I am a diligent and hard working student who takes academic pursuits with the right seriousness and vigor.

I took up Electronics and Communication Engineering for my undergraduate study without much of an idea as to what it would hold. Thankfully, I seemed comfortable with it right from the start. I would owe that to my comfort with Mathematics and logical reasoning. I was doing well in my coursework. Logic Design became my first love among the courses prescribed. As semesters passed, I started feeling the need to do something extra, something that would solve all my unanswered questions. So I decided that would look out for various opportunities beyond the academic setting to gain knowledge about the latest trends in technology and also to find out for myself what specific field would interest me the most.

One such opportunity came by during my 4th semester with regard to a series of boot camps on VLSI conducted by RV-VLSI, Bangalore. I grabbed the opportunity to learn more than what the text books would offer. I was really excited to see how a chip has so many stages throughout its life cycle, from design to tape out. I enjoyed hand-on sessions on back-end design of inverters using current industry tools. The complexity, precision and automation left me in awe. This got me excited in the field of ASICs, FPGAs and Analog design. Here too, we saw ways in which people in the industry applied the basic theoretical knowledge to solve complex problems. A mental note I made from this experience was that basics were key. Logic design, basic electronics and network theory seemed indispensible.

A more recent event that still gets me all excited is the 15 day course under the Continuing Education Program that I attended at IIT, Madras after my 7th semester. We worked with a Blackfin DSP from Analog Devices using VisualDSP++. We used assembly and C programming to perform a range of amazing activities such as Image compression and restoration, A-law companding, generating DSBSC and SSB signals, FM, serial port and a range of other real-life applications. We got to see and experience the phenomenal power of a DSP compared to a General purpose microprocessor. It was a ‘see it to believe it’ experience. I learnt the importance of practical knowledge to be able to truly appreciate the technology. I felt truly privileged to have done the course during the vacations and was satisfied by putting my time to good use.

On various other occasions I tried to expand my knowledge by attending seminars and workshops in areas relating to Embedded OS and Microcontrollers and even photonics. I found the field of embedded systems an “electronics wonderland” for the myriad of possibilities and options, which is why we based our final year project on creating an autonomous vacuum cleaner. I learnt so much during the last semester that I felt I had known nothing at all. Debugging was particularly a challenge. With proper guidance, we got clarity on how to approach a problem at hand, and were eventually able to successfully complete the project on time. The key points I took from this experience was effective utilization of time and resources, importance of planning, taking collective decisions and the nuances of working as a team. Also, attention to detail and the price paid for ignorance were valuable lessons learnt.

I was one among the 20 students who were selected in campus interviews for MindTree Ltd. (where I am currently employed from \_\_\_\_\_\_\_\_ ). Over the past few months, I have learnt the basics of DBMS, C sharp and testing practices. My area of work is Layer-2 switch testing (for Aruba Networks) which includes smoke tests, sanity tests and regression tests. It has been a different learning experience in the work place environment, technically and otherwise.

All these experiences in diverse fields have given me a good idea of what I would like to pursue my further education in. Some of the courses that caught my fancy during college were: Logic Design, Network Analysis (network theorems in particular),Microcontrollers(8051) and Microprocessors(8086) Information Theory and Coding, Image Processing, Embedded Systems (Especially RTOS, embedded programming), Fundamentals of CMOS VLSI, Computer networks, DSP lab, and VLSI lab.

I have been able to balance academics with other activities well. I have spent a good amount of time on sports, cultural activities and leisure, thanks to my parents’ encouragement and their belief in making me a well rounded individual. I particularly love playing Basketball, music, reading and fine arts. I find pleasure in nature camps and treks, with some adventure sports and bird watching too. Throughout my education, I have been an active participant in school activities and have represented my institution in many competitions: cultural and sports.

American education system is widely known to offer the best in education. Graduate school will expose me to various areas in communications. It is the place where I can learn to do research, write papers and reports. My choice of \_\_\_\_\_\_\_\_\_\_\_\_ University is a very deliberated and meticulous one, which has come about by extensive and exhaustive scrutiny of scads of universities. This is the institution I find most befitting for its apt program. Your University over the past years has molded numerous students into knowledgeable, creative and competitive individuals, which is what farsighted organizations seeking to explore technological challenges perpetually look for. It has also been a front-runner in pursuing research of international excellence. Current areas of research at this institution by Dr. \_\_\_\_\_\_\_\_\_\_\_\_\_\_in \_\_\_\_\_\_\_\_\_\_\_\_\_ and Dr. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in \_\_\_\_\_\_\_\_\_\_\_\_ really match my interests. I long to put in my contribution in these activities.

Having made my goals and aspirations lucid, I hope you appreciate that a graduate study in your university will be the most logical extension of my academic pursuit. It would be a stepping-stone to higher echelons in academic researches that I intend to pursue. I aver that my talent will be utilized to its optimal best if I have an opportunity to be a part of the intellectually stimulating environment of your university. I shall persistently strive to do your institution proud.