Statement of Purpose

"You must dream before your dreams can come true."

A.P.J Abdul Kalam

As quoted by Mr Kalam in his autobiography a dreamer must always dream until those dreams come true. I am a dreamer and despite the failures that I face every day I would always try to overcome them no matter what the cost is as these small persevering acts would make my dream to work in or may be to lead a company of my own at a global level becomes true. Even though the path ahead is not a bed full of roses, my determination, sheer will, endurance and hard work will aid to make my dreams to reality.

While I was a child, I used to wonder how mobile phones and computers work. I used to spend ample amount of time trying to figure out their principle. I was intrigued by the IC chips from broken toys. During my teenage years I was fascinated by the decrease in size of mobile phones and computers. To have a better understanding of these topics I spend a lot of time at science fairs and workshops. My intuition and passion landed me in the Electronics and Communication engineering classroom of DR. A.P.J Abdul Kalam University, Indore.

From the start of my academic life at the university I was enlightened on various modules of Digital circuits and systems, Network Analysis, Electronic devices and circuits, Integrated Circuits and its applications, Automation systems, Electromagnetic compatibility, Microprocessors and micro controllers, Communication Network and Transmission lines. These subjects have helped me to expand my knowledge to an extent that I feel the need to explore more deeper into these subjects. Automation systems and Electromagnets were the subjects that caught my attention the most. I was always interested to know about the working and operation of communication devices and these courses helped me to clarify my doubts on various matters of the subject. Now I feel like I have a lot more to explore in this field and a master's degree can help me go further in this area.

Other than the regular course work I gained additional knowledge through various online and offline platforms. I have completed courses on python data agility, Leadership and emotional intelligence, Introduction to IOT and Embedded systems from Coursera. I have also attended a webinar on the topic Transparent Thin Film Transistor for AMOLED conducted by SAINGIST College of Engineering, Kerala. I was also able to complete a 10-day internship training on Embedded systems, a 4-hour class on BIO CHIP Technology and SPACE SOLAR POWER at Zindot Technologies. I have also done an NPTEL course on CMOS Digital VLSI design. National programme on Technology Enhanced Learning is a project of MHRD initiated by seven IITs along with Indian institute of science, Bangalore in 2003.All these trainings and classes have motivated and educated me to go forward in my career. I am also proud to say that I have been an active participant in the sports and arts competitions at the university. I was also the captain of the university badminton team. I can say that all these activities and participations have helped me so far in my career and I believe that they will continue to help me in my journey forward.

I have also conducted a seminar on the topic "Digital Twin Technology" which was well appreciated and accepted among my professors and colleagues. In my final year, I undertook a project to identify the vehicles using a unique ID and to control the road traffic. The project was named as "Identification of vehicles using unique id and traffic automation". The objective was to introduce a unique ID for tracking and recording data of vehicles passing through a junction with GPS receiver. It receives signals from GPS satellites and determines locations, with these collected data traffic signals are controlled using C++ to develop custom traffic signal, traffic signal algorithms. It can be used to analyze traffic flow and develop optimized signal timing based on different traffic scenarios. I was the head of my team. Through hard work and dedication to the project I was able to lead my team to success. This project has given me great exposure in the field of design as well as simulation. As the head of the team, I was able to manage the team successfully and that experience further helped me in my career while working for Techmaghi as an Assistant manager.

My academic years enhanced my logical and analytical understanding in Engineering, as modern society has been established on software and communication. My experience and growth in the corporate world had substantially improved my time management skills, resource

management and teamwork which would have been impossible to reap the benefits if I had neglected to take any effort. Furthermore, from the interactions with various people during my training, I perceived the wonders that science and technology have unfolded before us are not limited to time and space.

As of now, I am working as Assistant Manager for Techmaghi. My main duties and responsibilities are to check on my team and motivate them to perform more and to appreciate them for their achievements. Even though my dream was to work in my core field, I accepted the job offer from Techmaghi in management because I am confident that slowly but surely, I will achieve my dream and the experience in management can further help me to lead a global team or in launching my own company.

Significantly through the training from my job, I also grew having a better understanding of the corporate environment and understood the importance of management skills as well. This training helped me to lead my team in Techmaghi to launch a nationwide online technical workshop for engineering students on the topic "Electric vehicles, ECU Tuning and data science with python". More than 56000 students participated in this internship, and it was marked in the India book of records as the largest live online technical workshop ever to be conducted in India.   Moreover, when I started interacting with people from various organizations, I understood what every organization expects and what wonders could be done when we put together our technical and management skills which led to a realization that a master's in electrical engineering and information technology would certainly, expand my knowledge and pursuing a job in the same field would be highly imperative. The decision was also supported by the fact that having a master's degree from a university as reputed as Otto von Guericke University can eventually help me achieve my dream to have an international exposure in Electronics and communications field of engineering.

Germany was my first choice for a master's programme because Germany is one of the global leaders in engineering. "Made in Germany" is always considered as a mark of quality all over the world the world. Germany is also the most powerful economy in all of Europe and third in the world. Joining for any degree programme in Germany is much more affordable than courses

offered in UK or US. German universities provide similar standards along with more safety and security for international students. Obtaining a master's degree from a country which has a rich history in the field of engineering will always be a boon to my career.

With the rapid progression and enhancement in this branch of Engineering, pursuing my master's Program in Otto von Guericke University that has an international reputation in practical education and outcome-driven research programs, I deem to realize my dreams. I came to know about Otto von Guericke University through my friend who is studying there, he had so much to say and hearing from him I was interested in the university and then I did research of my own and found out about the master's programme in Electrical Engineering and Information Technology. The curriculum aligns with the subjects that I am interested, furthermore the faculty list and alumni declaration motivated me to go forward with the application process. I found out that it is one of the top research-oriented universities in Germany. I believe that it is one of the best universities for students like me who grind to make their dream of a global career be true. With its amazing atmosphere and surrounding I believe that it will help me to be more creative and innovative. Likewise, with higher employment prospects, I strongly believe a master's degree from your esteemed university will broaden my scope of learning and help me reach the apex of my career and thereby using it to serve the industry and society as well.

After the completion of my studies, I wish to gain some global experience in my field of study then come back to my home country and set up a startup of my own. I believe that the master's degree that I earn from Otto von Guericke University will help me access a global network and to combine the newfound experience with my talent and innovation while launching a company of my own. Hopefully looking forward for your response.

Kind regards,

Dilruba Aleema