Statement of Purpose for Masters

A desire to extend my knowledge and an enthusiasm to solve the demanding problems faced by the industry today, motivated me to pursue **Master's in Networking**. I believe that my educational background has instilled in me the qualities required to meet the rigor of this demanding course, and subsequently, the profession. I bring along with me a strong grasp of fundamentals in Electronics, unique but relevant work experience, along with a desire to learn, a penchant for teamwork and leadership, and a zest for challenges.

My first biggest decision which set the path for my career was choosing Electrical Engineering as my field of study even though my parents were against it. Being the owner of a manufacturing company in the FMCG industry; I remember the day I and my father had an argument about what I should do with my life. While he wanted me to pursue Business Management, I always had a desire to know how things work, wanted to learn by experience & yearned to solve challenging problems. Ever since the day my father brought our first television set home, I have had a peculiar interest in knowing how one could fit an entire world into such a small box. A few other insanely inquisitive questions led me to choose to study Electrical Engineering, and I still believe that it is the smartest thing I have ever done.

I am deeply inspired & motivated by my professor Dr. Rama Chandran, who is very well known in the country for his contributions to the Department of Telecommunications, Government of India., Upon his advice, I decided to pursue, and thereby developed an interest in "**Networking**" during my third year. The courses "**Computer Networks**" and "**High Speed Networks**" coupled with my summer internship at Vodafone, where I handled **Routers and Servers,** made me realize how much interested I am in "Networking". Consequently, I chose to specialize in Networking. My interest further aligned me to design a Bluetooth Personal Area Network for controlling and monitoring the functioning of all the devices connected to the same network. Towards this, I chose to take "**TCP/IP Networking**" and "**Network Security and Cryptography"** as part of my coursework during my fourth year. My interest in these courses reflected in my GPA, standing at 9.6 on a scale of 10 in these subjects. I also began increasing my cognizance about Computer Networks by collecting information from the internet and reading research papers which soon turned into a passion for me.

I also worked on two projects during my third year. The first was "**Bluetooth using LABView**" where I led a team of seven students. We used LABVIEW Bluetooth module to control and transfer data from one device to another by varying the quarter wave antenna length thereby increasing the range of the Bluetooth device. Although the increase in the range compared to the battery consumption was not commercially viable, we were successful in increasing the usage range of the Bluetooth device.

Based on my interest towards networking, I was placed in one of the largest telecommunication companies in my state, "**Bharat Sanchar Nigam Limited**", to undergo a very prestigious internship program which allowed me to work in the company for the entire summer. A study on the company and its products, introduced to me the importance of providing innovative solutions

to satisfy the needs of the industry. I concluded from my findings that in India, communication is relatively cheap and effective, and also is an ever-growing demand, but faces massive operational, infrastructural, and logistical challenges. I hence worked on optimizing "**PSTN Routing**" by determining the most cost-effective way to route calls, which was lauded by my mentor engineers in the company, and was implemented immediately. This gave me valuable insights into how companies operate, the necessity of good organizational structures and the significance of well-designed equipment and strategy.

In the near future, I see myself working in the Research & Development department of a reputed company where I would get an opportunity to solve some of the major challenges of the industry. I seriously consider pursuing a Doctoral Program (PhD) at a later stage, in order to further my knowledge of the industry. Towards this, I chose to pursue Master's in Computer Networks from the **A.B.C College of Engineering and Computer Science - Department of Electrical Engineering & Computer Science, University of Example,** primarily because the school's strength lies in **Networking and Cybersecurity**, which closely commensurate my research interests and, hence would help me achieve my career goals.

Furthermore, I am particularly interested in **Professor Peter K. Mourinho's** work and believe that his contribution to **multiband cognitive radio networks** will be vital in the years to come. Also, his work is in line with my interests and current training level, making it an ideal choice for me. I will be more than honored if I can earn a spot in his next research group. The well reputed course, experienced faculty and world class facilities are an added advantage. I would fully utilize the resources that the Wallenberg Hall provides, as I am particularly interested in the field of Networking. The special 24/7 laboratories provided for student research on Routers and Signal Processing is exactly the kind of opportunity I am looking for, as I could totally see myself working in the labs day and night. I also believe that my experience coupled with thorough enthusiasm for research would make me a candidate for a Research Assistantship at your institution.

I have always believed in giving something back to the society. I remember my mother telling me that helping others is the rent we have to pay for living on this wonderful planet. That statement had a profound impact on me, and since that day, I have never turned down an opportunity to pay it forward. Apart from little acts of kindness from childhood, I recently joined "**English for Everyone**" (NGO) where I have been teaching the English Curriculum developed by **Oxford University** to 30 economically backward kids for the past year and a half. Though I joined as a teaching volunteer during the weekends, with constant enthusiasm and efforts, I have been able to make an impact on the way my class learns, and I consequently became the mentor of my batch of 30 volunteers, who teach to over 600 children. Given my experience in teaching, and an unquenchable thirst for Networking, a Teaching Assistantship position at your institution would certainly further my interest and skills, ahead of my future career objectives.

I sincerely hope that I qualify all the requirements for admission into your Graduate Program and that my application is favorably received by the admissions committee.

Thanks & Regards,

Ramesh Suresh