I am applying to the North Carolina State University for admission to the Master of Science program in with an objective to pursue a career in research in the field of Computer Networks, either in industry or in academia. Ten years from now, I see myself as a skilled and knowledgeable research professional in an organization. Master of Science is an important crucial step towards this objective.

I was first exposed to concepts in Computer Science in junior and senior years of high school. My foundation in the major fields of Computer Science began after I entered College. During this period, I found the courses of Networking in Computers most intellectually satisfying and stimulating. I am currently exploring Advanced Computer Networks as a course in the seventh semester and plan to take up Network Security as an elective course in final semester, in order to broaden my knowledge in this area.

The stimulating academic environment in my undergraduate training in the Department of Computer Science and Engineering at the Bharati Vidyapeeth’s College of Engineering, New Delhi and my summer internship in the year 2013 at International Institute of Information Technology, Bangalore, where I worked on Software Defined Networking (SDN), have enriched my exposure to research. It is this experience that fuelled a deep interest in research work in me. It has also helped me develop a strong aptitude for the type of problem solving and problem discovery that it involves. These factors have helped me decide to pursue active research in the field of Computer Science.

As part of my six-week summer internship at IIIT Bangalore this year, I worked on the SDN - its architecture, purpose and implementation under the guidance of Professor Debabrata Das. The problem statement assigned to me was to study the access control in SDN network and to implement ‘layer 2 firewall’ by defining the route of the incoming packets in the flow table. This opportunity, not only helped me to know more about Computer Networks and related fields, but also offered me a platform to interact with other researchers. I now realize how important it is, for a researcher, to interact with other people working in the same field and at the same time to be able to work individually.

I am currently involved in research in the field of Brain (Human) Computer Interaction as my minor project. I have studied various applications of the BCI system and its implementation. My research involves study and analysis of the datasets captured in the ongoing BCI experiments. Analysis of the dataset includes classification and feature extraction. The project aims at finding the most efficient classification algorithm generating the least amount of error.

Due to my orientation towards the practical implementation of technology and dire passion for teaching and spread of technology, I joined the Google Technology Users’ Group (now Google Developers’ Group) and subsequently became the Organizer of GDG BVP (Bharati Vidyapeeth’s College of Engineering sub-chapter of Google Developers’ Group). My dedication and hard work, led me to the position of the Organizer of GDG New Delhi, a post that I am holding till date. During my journey of spreading awareness about technology with GDG, I not only took sessions on various technology-related topics but also initiated the GDG Women New Delhi sub-chapter under the aegis of GDG Women India to promote Women in Engineering and Technology. Recently, I proactively helped my college in starting a sub-chapter of the ACM (Association for Computing Machinery), of which I currently hold the position as the Vice Chairperson.

I strongly believe without any iota of doubt that the Graduate program at University of Southern California would certainly suit my goals. I have been justifiably impressed and feel enthused by the computing facilities and the research work at the University of Southern California. I am hopeful that the attributes of my personality such as sincerity, hard work, and balance within, creative thinking, dynamism and good analytical skills and pursuing projects, as a team with high level of enthusiasm even in difficult and conflicting situations would contribute to my research work at the University. I am confident, without being egotist, that given an opportunity, I will be able to make significant valuable contribution to the ongoing research at University of Southern California and accomplish the tasks assigned which would be worth reckoning.