**Statement of Purpose**

The simplicity that Information Technology has brought in people's life and the ability to simplify complex tasks inspired me to take up Computer Science for my Undergraduate course. The urge to achieve and prove myself among the greats in the history of science has been my ambition from my undergraduate days. The mental ability to approach a problem with the right blend of logic and reasoning has supported me in inching towards my goal. The eagerness to work on complex industry problems, growing challenges which require innovative solutions and enhancing the solutions up to perfection thereby rendering service to society fascinates me to pursue my Masters in Computer Science.

I stepped into the undergraduate studies in a prestigious and a top notch institute R N S Institute of Technology. I maintained a stellar academic record, scoring 74% and graduated with First Class with Distinction. As an undergraduate student, I was introduced to a wide variety of courses which this incredible field of Computer Science has to offer. Courses like Microprocessors and Computer Organization helped me in understanding the physical framework on which this field is structured. Operating Systems, System Software and UNIX made me realize the importance of platforms which programming languages such as C, C++, C# and Java exploit, but subjects that interested me the most were Data Structures, Algorithms, Data mining & warehousing, Operating Systems and all the Networking subjects like Data Communication, Mobile Communications and Computer Networks.

To reinforce the broad spectrum of coverage, I developed a 2-Dimensional Graphic Text Editor which gave me firsthand experience in designing and implementing a graphical user interface. I dwelled deeper into Networking by presenting a paper on Virtual Router at IEEE paper presentation competition. My further interest in networking subjects like Data Communication, Computer Networks and Cryptography sparked me in the application of technology to real world problems. This was fueled by my project "Centralized Security Centre (CSC)”, which gave me the practical application of secure communication between two entities by making use of the various protocols such as HTTP, SOAP, TCP, FILE Engine and cryptographic algorithms like RSA and TDES.

I am currently employed with EMC Data Storage System, one of the top providers of Information Infrastructure solutions, as part of the Content Management division. I am working as part of Content Server team, core area of Documentum product. Working as part of the Server team has given me the exposure to many modules like Full-text, Authentication, Workflow, Lifecycle and email notifications.

Working on full-text module helped me in understanding the complete functionality of the indexing and the searching process. The further enthusiasm to explore the way theoretical knowledge is used in practical world I worked with the Microsoft FAST Instream team to understand the various algorithms and data structures used in building the index tree and to retrieve the search results. I applied this knowledge of algorithms and data structures in solving few complex feature requests and was well appreciated by Architects across the geographical regions. I gave knowledge transfer to my senior members in the team and presented a whitepaper on the same. Senior management recognized me by giving the ownership of this module. I further enhanced my technical skills in data structures, algorithms and C++ design patterns by contributing in developing an in-house search engine, aimed to increase the search performance by 40%. This helped me improving my problem solving and result-driven skills. My efforts were recognized with a meteor award.

Apart from full-text module, I also worked on "EMC Documentum Kerberos SSO (Single Sign On) Authentication" project, a solution for network security problems. Working on this project gave me the detailed exposure to the complete software development lifecycle right from requirement gathering, designing the use cases at the high level, flow diagrams and sequence diagrams at the low level, followed by development. This also helped me to reinforcing and enhances my knowledge on network security and cryptography. Since I completed this project in a short span of time satisfying one of the major customer requests, I was nominated for the Customer Champion award given across EMC, India

I have been in this firm for more than 3.5 years and have been trained intensely in the discipline of Content Management Domain. By the virtue of my commitment, I have risen from an entry level Associate Software Engineer to the role of Software Engineer. My knowledge and interest for Memory Management, Threads, synchronization mechanisms and various other OS concepts was kindled further when I started working on feature requests on various platforms. My work at EMC has bridged the theory I learnt in college and the way in which the concepts are actually implemented. The work experience had provided me with intuitive thinking, has sharpened my group interaction skills, improving my technical knowledge and research abilities in the process.

Amidst my academic and professional life, I have balanced my involvement in extra curricula activities. I am currently working on Alumni Management Software using open source content management suite, MySQL and JSP for SRVM, a charitable institute which raises money from Alumni. Also, I actively participate in rural education schemes and dedicated 1-2% of my salary every month for the cause. I was an active member of our college cultural team and participated in the dance competition.

The wide range of subjects to specialize in and the research facilities provided by Universities at United States of America is the crushing force for me to do my MS in US. My in depth research on the US universities led me to **University of Nebraska** as I have confirmed the university stature through the Alumni network, Departmental information, and the collaboration with nearby industries and communities, courses provided which fits my agenda and the employment opportunities. I have been especially impressed by the research being carried out by Dr. \_\_\_\_\_\_\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_\_\_ and Dr. \_\_\_\_\_\_\_\_\_\_\_\_\_\_in \_\_\_\_\_\_\_\_\_\_\_\_\_. All of the above reasons have encouraged me to submit my application to your university and get all the guidance and infrastructure to pursue my graduate studies and gain incisive understanding. I would really appreciate if you could consider me for Research/Teaching assistantship with any of the professors in the Computer Engineering Department or for financial aid of any form.

The knowledge and experience that I have gained has just given me the taste of computer science, but has certainly not abated crave in me to know the subject in depth. To satisfy my quest for knowledge and specialize in these focus areas, I strongly feel it is the ideal period for me to do my masters in computer science which has been my goal for a long time. With my confidence, good articulation and managerial skills and an eye for research, I assure you that complete justice will be done to all the opportunities provided to me, and I will prove to be an invaluable asset to Department and University as I embark on this enriching journey for Knowledge.

Kavya K R