STATEMENT OF PURPOSE

How hard is it for us to believe that men once made it to outer space with the aid of computers that were far less powerful than many of today's electronic equipments! It simply amazes me how computer technology has evolved over the years paving way for advancement in other sciences. For a naive computer user, who was only aware of the massive advancement in the field, an undergraduate study in computer science introduced various challenges the industry is facing today in its different disciplines. Amongst all, the research going on in the area of Operating Systems has inspired me the most.

I completed my Bachelor of Engineering in Computer Science at Sri Jayachamarajendra College of Engineering, one of the esteemed institutions in the state of Karnataka, India. My undergraduate study provided a stimulating academic environment and helped me gain substantial knowledge in different areas.

During my junior year I worked on a project, "Implementation of Page Replacement Algorithms". This project helped me realize the significance of memory management, a key function of any Operating System and the need for strategies beyond conventional algorithms in identifying pages that will be referenced soon, so that they can be loaded into the memory in advance before they are actually referenced.

My final year project, "An Empirical Approach to Classify English Web Pages", classified a web page as written in American or British English. This performed classification using Natural Language Processing (NLP) tasks like parsing, tokenization, text segmentation and part-of-speech tagging. The project strengthened my interest in Java and exposed me to the challenges involved in implementing various NLP tasks.

After my undergraduate study, I have been working for Oracle India Private Limited (erstwhile Sun Microsystems) for around 1.5 years. My team is primarily engaged in performance engineering of applications on Solaris Operating System and Oracle Hardware, which includes optimization of hardware resources and tuning of operating system and network parameters. I have also been involved in the development and upkeep of "Oracle Preflight Application checker" tool, which checks the readiness of applications for a particular version of Solaris. My industrial experience has enhanced my perception of the systems field and has motivated me to delve deeper.

Known for its diverse culture and research opportunities, NC State has been my choice to pursue graduate studies. I am influenced by the work of Dr. Vincent W Freeh in the areas of operating systems, parallel and distributed systems. His work on "Architecture-independent parallelism for both shared- and distributed-memory machines using the Filaments package" closely aligns with my interest. It would be a privilege to work on such projects where virtualization is at the core of developing portable and parallel applications.

The thought of being a part of the wolfpack has always excited me. I am amazed by the resources that NC State offers its students, particularly the Hunt Library, a technology rich library with state of the art reading spaces. An opportunity to utilize such resources would enable me to sharpen my skills and contribute to the research at your university.