

# Statement of Purpose

## My Long Term Goals

My undergraduate training in the Department of Computer Science and Engineering at the Indian Institute of Technology, Bombay, has exposed me to a stimulating academic environment where learning and research go hand-in-hand. Through the many opportunities I have had here, I have found that I have a deep interest in research work and a strong aptitude for the type of problem solving and problem discovery that it involves. I have, therefore, decided to pursue active research in Computer Science as a career.

## My Areas of Interest

Of the many fields in the Computer Science spectrum, I am especially interested in Computer Systems. Within this field, I am interested in computer networks, distributed systems, operating systems and distributed operating systems. My junior seminar work, my practical training and my courses have given me plenty of exposure to these areas and I feel that I have sufficient motivation and aptitude to work in this field.

I am also interested in Programming Language design and Programming Systems. I have worked in these areas in my summer project at TIFR and in my ongoing B. Tech. project. I would like to continue to learn about these areas in my graduate program.

## My Immediate Goals

I plan to work towards a Ph. D. program with a focus on Distributed and Parallel Operating Systems. I would also like to follow up my interests in Computer Networks, Distributed Systems, Operating Systems and Programming Languages through my course work. I feel that this should be my next step on my road to a research career in Computer Science.

## Why Duke?

I have selected Duke as the place for me to continue with my education because I found that the Graduate Program in Computer Science suited my needs perfectly. I have found the Duke Computer Science Department faculty and the research being carried out in Computer Systems, especially in Distributed Operating Systems, to be very impressive. I feel that to be associated with this group for the many years of my Ph. D. would stand me in good stead for my research career. I have also been impressed by the computing facilities available at Duke for research and education. These are much superior to those available to a graduate student in India. Taking all these factors into account, I feel that Duke is the perfect place for my graduate studies and I am confident that I will make a positive contribution to the ongoing research work at Duke.

### **Am I Prepared?**

My undergraduate preparation at the Computer Science and Engineering Department of the Indian Institute of Technology, Bombay, has given me a very substantial knowledge of the basic areas of Computer Science. Through my junior seminar work, I have acquired a good knowledge of distributed operating systems and the problems they entail. It also exposed me to the broad fields of computer networks, distributed systems and operating systems. I have also been exposed to practical computer networks and network programming in the course of my practical training at the State Bank of India, Head Office. My course projects have given me plenty of experience in programming using various programming languages, software packages and operating systems. I have selected *Introduction to Computer Networks* as an elective course in the seventh semester so as to broaden my knowledge in this area. Therefore, I feel confident that I have acquired both a broad base in Computer Science and a strong foundation in Computer Systems.

### **Summing Up**

I am aware of the hard work and perseverance necessary for research work and I know that it is not always as exciting as the published results seem to indicate. Nevertheless, I am sure that my aptitude and drive will see me through the challenge. I hope to have a long and mutually profitable association with Duke.