

Statement of Purpose

Academic & Career Objectives

My long term career goals include the pursuit of research in the field of Theoretical Computer Science and teaching in an academic environment. I have found that a career in research is both intellectually stimulating and satisfying and hence I have decided to take this up as my career objective.

Degree Objectives

I want to work towards a Ph.D. in Computer Science in the field of Theoretical Computer Science. My interests include both the design and analysis of Algorithms as well as Computational Complexity Theory.

Reason for Graduate Work

I have always been fascinated by mathematics. As a part of my undergraduate curriculum, I have been exposed to a range of advanced mathematical techniques and I have been especially drawn towards both the analysis of Algorithms and Complexity Theory. These fields have both a strong mathematical flavor as well as the potential for research which is what attracts me towards them.

The fact that these subjects form a unifying feature of all fields in Computer Science and their quest towards achieving the limits of what can and can't be done, form part of the reasons for my fascination in them.

An undergraduate degree is merely an exposure to the various fields in any branch of higher education. I feel that my undergraduate curriculum has given me a sufficient enough exposure to all the various possibilities for research that are possible and I have chosen the one for which I have both an aptitude as well as a liking.

In order to pursue an active career in research, it is necessary to both study and understand the finer nuances of any subject. I believe that Graduate Studies will not only provide me with advanced knowledge about the field but also prepare me to be a good researcher. It is precisely this reason which prompts me to take up Graduate Studies as the next step towards my career objectives.

As an initial step towards achieving my goal, as part of my undergraduate studies, I have chosen my electives so as to enhance my understanding of these subjects. These include such subjects as **Design & Analysis of Algorithms**, **Combinatorics** and **Abstract Algebra I**. I have also audited (taken as non-credit) a Graduate level course **Algorithms & Complexity**. I have attended an Advanced Mathematics Training Programme in Summer '93 so as to enhance my mathematical abilities.

Why have I chosen Stanford

I have chosen Stanford as the place at which I would like to pursue a doctoral degree because I find that the graduate program is fully suited to my needs and that it possesses a strong faculty in the field of Theoretical Computer Science.

I have also consulted the professors in my university who are working in the field of Algorithms and Complexity Theory and they have strongly recommended the research work in these fields at Stanford.

Hence, I have applied to Stanford so as to fulfill both my academic as well as my career objectives.