

Write a statement of 300 to 700 words concerning your past work in your intended field of study and allied fields or plans for graduate study (INCLUDING THE DEGREE YOU WISH TO TAKE) and a professional career:

I have been interested in applied mathematics, and especially the aspects of it concerned with computers, since I attended a series of lectures on programming for the Univac computer, in my freshman year. I had by this time decided to concentrate in Physics, however, and there I remained. This was for a variety of reasons. It seemed that a great many courses I might take for their use in Applied Mathematics might also be counted towards Physics requirements; in fact it might turn out that whether I left Physics for the Division or not I would take approximately the same program. It also seemed that Physics was the more fundamental field of study, one that might be of more universal interest no matter how my exact interests might change.

In any event I continued to take courses useful to Applied Math. Perhaps I moved too rapidly in this. I am referring to Applied Math. 201 and 202, in which I received C's. I suspect that during my Junior year I was not quite ready for these nominally graduate courses. I also feel, however, that I could have done better with more effort. My marks that year were in general rather mediocre, and I must admit that it was probably due to less than zealous application.

After my Junior year I spent a summer in the Mathematics Research department at Bell Telephone Laboratories, as a programmer. This further reinforced my interest in the uses of computers, although I became less interested in programming as such and more intrigued with the mathematical effort behind it. I was fortunate enough to be able to do a good deal of the mathematical analysis required by the problems I was assigned, and this was what made the job really worth while. However, I do feel that I will always enjoy programming a problem. During this job I also became quite interested in non-numeric aspects of computer use, such as theorem-proving and language translation, although I was not in direct contact with work of this kind.

My plans for graduate school are, at this point, somewhat undefined. I feel fairly sure that I will continue on to get a doctorate, but I cannot say just when. After I receive a master's degree, which is my immediate goal, I may do military service or perhaps work for a time before returning to a university. Exactly what I would do depends, of course, on the results of my first year of graduate study.

(continued on separate sheet)

I hereby certify that the information given by me on this application is complete and accurate in every respect, and I understand that any misrepresentation may be cause for denial of admission.

My plans for a career are also a bit nebulous, or at least hard to describe. I do not, particularly, wish an academic career; but I can, for instance, imagine myself working on switching systems for the telephone company, devising new languages for communication with computers, or working on the logical design of a new computer. I feel that my interests in the whole field of mathematics and mathematical machines is broad enough to enable me to work happily in almost any branch of this field.

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