**Program Applied: Computer Science and Engineering**

In the beginning there was the word. Within six working days Jehovah created the world and human beings. Had Jehovah continued with his grand Genesis on the seventh day, I believe he would have said: “Let there be a network, so that my people, wherever they live, can communicate with, understand and befriend one another.”

The Internet is the very incarnation of this vision. As is universally acknowledged, the invention of the Internet has produced a far-reaching influence on the destiny of the human beings, not only in the economic sphere but also in every aspect of social structure and organization. Human cognition, the way people examine the world and their way of life, almost everything has fallen under the all-encompassing spell of the Internet. As a student of computer science and engineering, I  feel fortunate for the coincidence of my life with this age of the network, which provides me with important opportunities to contribute my efforts to the construction of the digital Tower of Babel.

It was precisely because of cherishing such an aspiration that I chose to specialize in computer science and technology during my undergraduate program. It is out of this same motivation that I have decided to apply for a Ph. D. program in Computer Science and Engineering at your esteemed university. Your university is the academic Mecca for young students worldwide and it is inevitable for me to encounter fierce competitions in my application. However, my devout faith, indefatigable stamina and strong academic background, rich practical experience and sound research and development ability, all endow me with full confidence in the challenging undertaking.

My 4-year undergraduate career at XX University has been very rewarding. This is not only because I have been able to specialize in an academic field in which I am interested but also because I have made substantial academic achievements. My overall GPA reached 84/100, with top-ranking scores in almost all the core courses，an achievement which has brought me scholarships and awards from the university. The courses in computer software and network have fascinated me most. Based on my understanding of the software and network and on the study of relevant theories, I applied Visual C++ and Java Language to undertake the network edition of game programming. That became the first real experience from which I tasted the pure joy of undertaking scientific and technological explorations.

Impressed by the rapid advances in network technology and urged by the need to update my knowledge and to achieve necessary professional qualifications, I have devoted a large part of my extracurricular hours to the extensive reading of recent literature and research papers to keep myself abreast with the latest developments in network technology. Through my continued self-education, I obtained my MCSE(Microsoft Certified Systems Engineer) and CCNA(Cisco Certified Network Associate) certifications. At present I am preparing for the CCNP (Cisco Certified Network Professional). On account of my unique knowledge and abilities in network, I was elected chairman of the Computer Network Association of my university and as its leader I have organized a series of academic events, including inviting leading network specialists to give serial lectures to the Association members and to students in general.

My distinguished academic and extracurricular performance came to the attention of some senior professors of my university who in turn recommended me to the Software Technology Head Company of XX Province where I was made responsible for the research and development of network projects. As assistant engineer of the company’s project team, I participated in three major projects featuring the campus network of the Agricultural University of XX Province, the Campus Network of the XX Provincial Taxation School, and the Phase-II Network Project of XX Provincial Library. Those project involved www servers, BBS forum, mail servers, ISP logging service. In designing and implementing an Intelligent Network Engineering Project, I used the broadband TCP/IP network as the basic environment to realize the VOD (Video on Demand), VOB (Video on Broadcasting), live televising of teaching and conferencing, video recording, digital control, and the replay involving dozens of TV programs.

In addition, I developed Office Documents on Demand, Flash, executable documents, and the specialized modules capable of such application and management functions as system editing, data retrieval, checking, statistics, jurisdiction, control, and fee calculation. When appraising the project, the panel members gave very positive evaluation of my work in developing the VOD system，commenting on the system as “operating stably and smoothly, having the function of multi-channel replay and recording on a single computer, large storage volume, powerful data retrieval, capable of substantial potential expansions in the scale, functions and modes of application.

At present, I am doing extensive preparatory research for my graduation thesis entitled Study on the High-Performance Switching of the Switch. For an undergraduate, it is rather challenging to undertake this research topic not only because relevant research in the academia is just tentative but also because there is an immense gap between China’s domestic research and the international research. In view of those factors, I have made extensive efforts to amass the most updated technical materials. By comparing and contrasting different schools of thought, I try to assimilate the academic essence of diverse schools. I have introduced changes into the existing switching patterns and designed new methods and techniques in an effort to significantly improve the network switching performance of the switch in the complicated topological structure. I have subjected my research to comprehensive testing on the basis of the network environment of the Cisco Network Technology Institute. So far, I have achieved some concrete results in the initial stage of my experiments for which I have won positive comments from my advisor Prof. XXX, laying a solid foundation for my subsequent research.

My talents and potentials in computer technology have won recognition beyond the campus. I have been listed in the Talent Group of XX Co. Ltd, a leading communication and network equipment manufacturer in China. I have been working part-time on the research and the development of network switching. By the time I graduate I can easily find full-time employment with this company. However, in order to fulfill my aspiration of becoming a network specialist, I am ready to relinquish this opportunity with its assured high salary and promising career development. Instead, I am in favor of continuing with my education in computer science and technology by seeking a Ph.D. program in the United States.

A good tree seedling needs fertile land to become a towering tree. XX University is the university that offers the richest academic nutrition to aspiring students. Its broad international background, free academic environment and many world famous professors and their distinctive and valuable academic thoughts constitute an inexhaustible academic reservoir from which I can absorb knowledge. I expect that I can carry out extensive study and research under the direction of first-rate experts and develop perspectives. It is my greatest wish that I could perform some kind of theoretical and technological breakthrough at XX University in the field of network switching. This is how I see I can best contribute to the construction of the digital Tower of Babel.