**Program: Communication System and Signal Processing**

For a 22-year-old young person, the strongest sense of pride comes from riding the tides of the time and demonstrating his or her passion and talents in the process. That is why I feel so excited in filing this application to your esteemed university for a Master’s program in Communication System and Signal Processing, having achieved satisfactory academic performance in my major Electronic Science and Technology at the Department of Optoelectronic Engineering, Institute of XX. Communication Technology is the most widely and rapidly applied technology in the modern world and its advances have radically changed the way this world develops. What a fulfilling life it will be to contribute my lifelong dedication to this exciting technology.

Of course, I am clearly aware of the degree of difficulty in successfully applying for admission into your prestigious university. Yet, my academic performance heretofore is sufficient to make me confident about my competitiveness. I was a top student as early as my middle school days and in my undergraduate program I have continued to maintain this high academic ranking. With a GPA well over 3.2, I am ranked top 3 among a total of 34 students in my class, winning second- and third-class scholarships on a number of occasions. This achievement should first of all attribute to my effective learning strategy. Even though serving as a student leader has consumed an important part of my time and energy, I can keep highly concentrated and mentally active during classes, hence I have managed to remain academic outstanding despite relatively small input of time and energy. On the other hand, I have cherished a strong interest in my major, electronic science and technology being my childhood aspiration. During my middle school education I won the third prize in the national XX, third prizes for provincial-level physics and mathematics contests. Ever since I began my undergraduate program, I have been closely following the recent development in my area of specialization. I am a regular reader of a number of technical journals like Digital Communication. In reading about each latest innovation and breakthrough in electronic science and technology, I would feel exhilarated and this exhilaration urges me to do a better job in my specialty so that I may be better qualified for more advanced study and research in the future.

Energetic and altruistic, I have been an extracurricular activist. I was twice given the honor of departmental outstanding student leader. As monitor of the class, chairman of the departmental student union, vice chairman of the Institute’s student union, I have organized a series of activities like sports meet, film and photography festivals. As the state level-II athlete, I have won major prizes in the short-distance dashing and in shooting. In 2001, I took part in XX in XX. More importantly, equipped with many novel ideas, I always like to attempt at what has seldom been attempted like launching the Institute’s first mountaineering society. Far from affecting my academic performance, my extracurricular involvements have contributed to my all-round development of personal qualities, improving my decision-making and problem-solving abilities and interpersonal communication, making me realize the need to learn from others, and becoming broad-minded and eclectic.

The Department of Optoelectronic Engineering of Institute of XX is an important teaching and research center for developing China’s optoelectronic talents. The nurturing academic environment and strong faculty in my department has allowed me to build up a solid foundation. I have excelled in both mathematics courses like Advanced Mathematics, Linear Algebra, Mathematical Equations & Special Functions and in specialized courses such as Fundamental of Circuits Analysis, Applied Optics, and Optical Fiber Technique & Application. In Fundamental of Circuits Analysis, my score was a rare “A”. Having thoroughly grasped the underlying principles, I would apply them flexibly to actual problems so that I can improve my hands-on abilities. In addition, I am skillful in computer applications and can operate various experiment facilities and electronic devices.

Optical communication is the most rapidly developing technology over the past few years and it is a field in which China is following closely the international trends. As a student with a strong engineering background, I am very interested in seeking further academic and career development in this field. The University of XX’ s Department of Electrical & Electronic Engineering represents one of the XX’ s premier Electronics Departments, rated within the top three for studying Electronics in XX. Its Center for Communications Research consists of one of the most highly respected and industrially-aware research groups in any XX university. As a key international player in the fields of communication system technology and signal processing, the Department has performed much pioneering research. In my proposed program, I would like to concentrate on mobile communication, wireless digital communication, and fiber-optical communication digital signal processing. I expect to receive in-depth training in modern communication engineering concepts and to achieve a deep understanding of the theoretical and practical aspects of communication systems, signal processing and optical data communications. For Communications Systems, the courses I would like take include Optical Communication Systems, Mobile Communication Systems, Network and Protocols, RF & Microwave Techniques, Digital Signal Processing, Digital Filter & Spectral Analysis, and Coding Theory. For Optical Communication, I would attend courses such as Devices for Optical Data Communication, Networks for Optical Data Communication, and Integrated Circuit Engineering. If possible, I would like to participate in research projects of my potential advisor and the practical experiences gained from those projects will become the basis of my dissertation.

In recent years, the Internet is undergoing alarming technological innovations; in particular, the technical inventions in the field of optical devices and optical network are extensive and rapid, with the likelihood of triggering a network revolution and realizing a truly optical Internet. It is a regret that at present the so-called optical communication is essentially optoelectronic communication or semi-optical communication as the communication process inevitably involves electronic signals and the exchange between electronic signals and optical signals. This has resulted in the phenomenon of the “electronic bottleneck” in the communication network, affecting the capacity of optical communication. How to study and solve those problems will be an important aspect of my future academic and professional pursuit.

An experience that happened to me 7 years ago—a serious traffic accident which caused me to lie fainted for 8 days and be hospitalized for 40 days—serves to build up my strong willpower and urges me to love life. It constantly reminds me that I should make full use of our limited span of life to maximize our personal development. While remaining optimistic, I will be most assiduous in the completion of my future degree program.