**Applied Program: Ph.D. program, Computer Science, Department of Electrical Engineering and Computer Science**           
         
As a child who has grown up in a family of scientific researchers, I have developed a long-standing love for science since my early childhood and have long wished to make my own achievements in the field of science and technology. This aspiration was to some extent fulfilled in November 2003, a truly defining year for me in my personal development, when I was invited to make a presentation at XX as the author of the research paper XX. In my presentation, I proposed the novel idea that relatively high precise position estimation can be realized through the relatively low-cost commercial GPS received the unanimous appreciation from the experts attending the conference. This international conference experience, while allowing me to savor the initial sense of achievement, has all the more reinforced my determination to seek a research career in computer science.

This achievement, among many others, would have been impossible without a quality education at the most prestigious university in China—XX University—where I have completed my undergraduate program and am on the verge of completing my Master’s program, both at the Department of Computer Science and Technology. During my undergraduate program, I relied on my strong background in mathematics and physics that I developed in middle school and on efficacious study strategies to score a well-above-average academic performance. I have particularly excelled in such specialized courses as Principles of Artificial Intelligence, Pattern Recognition, Hardware Design and Software Debugging. During my Master’s program, as in my undergraduate program, I have continued to pay close attention to the theoretical courses in computer sciences and have been able to speedily react to the most recent theoretical findings and new methodologies. In the elitist academic environment of XX University where competition is automatically exceedingly fierce, I know it is gravely inadequate simply to be a good learner. Only the fast good learner can be the fittest to emerge triumphant in competition. It is this consistent “Fast-Good-Learning” principle that has brought me a spate of accolades including top-level scholarships and academic honors.

As early as I was a junior student in my undergraduate program, I had contributed my efforts in the research experiments on speech recognition, digitalized remote controller of robots，intelligent battery charger and other projects. All those experiments initially proved to be major challenges to me as I discovered that my lack of relevant development experience put me in a grave disadvantage. To overcome my inadequacies, I resorted to intensive self-education and to auditing a lot of specialized courses until I could perform the experiments independently. In undertaking my graduation project for my Bachelor’s degree—Intelligent Air Data Sensors, I exercised my initiative of learning to a fullest extent. When I found that I lacked in-depth knowledge concerning the intelligent technology, I immediately set to consult a large amount of technical literature and within the shortest possible time mastered all the necessary knowledge regarding the fuzzy logic. This knowledge enabled me to solve all the major issues and to considerably enhance the precision of the sensors, resulting in the panel’s rating of my thesis as “first-class” for its high quality and innovative research.

In the course of my Master’s program, my academic interest and creativity have been brought into full play. Over the past years, while further modifying and improving the research on intelligent air data sensors, I have participated in the project XX. Working in a research team, my responsibility in this project was designing the electronic hardware circuit design of the robot and its control algorithm. In addition to fulfilling my own share of responsibilities, I communicated fully with other team members and the result of those effective communications was my proposal that distributed control architecture be adopted and individual processors be used to control the robot’s motion and communication. With efficient teamwork, our team,XX Mars, won XX. Subsequent to this project, I completed the research on the estimation system of unmanned helicopter based on GPS that I mentioned at the beginning of this Statement.  The air data sensor and the GPS positioning system that I developed single-handedly have both been applied in the unmanned aerial vehicle and unmanned helicopter, playing a vital role in insuring the overall success of the two unmanned projects. An important award I have won is the third prize during the XX Cup 2002 Creative Electronics Design Competition of XX University. My computer software development skills have been strengthened by the part-time job as software engineer that I have been working on for the past five years at XX Co. Ltd. I have been responsible for developing the application programs under the embedded Linux operating system, including the text editor, file manager, desk-top manager and e-mail client terminal software.

Currently, I am working on my Master’s dissertation at XX. The paramount problem I am to work out is the time management and synchronic management in distributed system and the simplification method in terrain visualization. This project is very meaningful to the extent that the simulation system we develop will promote future control research of robotics and that all simulation modules can be re-used and replaced with minimal addition efforts.

In retrospection of my past academic pursuit, I am very delighted to find that I have truly plunged myself into the formal research on computer science and have developed an unswerving interest in pursuing an academic career in this domain, specifically in computer application technology and robotics. In terms of robotics, I am interested in probing into such issues as the control of the autonomous robot, the application of artificial intelligence to robots, and the application of robots to practical purposes. I wish to study how to make robots act purposefully and successfully in a world in which almost everything is uncertain. Home to the most advanced computer technology in the world, the United States can offer me many fascinating concepts and technologies in computer science.

A careful reflection on my background indicates that I am a good match for XX as its Department of Electrical Engineering and Computer Sciences offers curriculum and research programs that closely correspond to my interest. Among approximately 85 faculty members, roughly half are in the Computer Science Division, indicating an almost unparalleled faculty resource. This is further proved by the fact that the Department includes 22 members of the National Academy of Engineering and 9 Association for Computing Machinery (ACM) Fellows. Three faculty have also won the ACM Turing Award. Under XX ’s Ph.D. program, concentrations cover analysis of algorithms, artificial intelligence, complexity, theory of computation, computer architecture, operating systems, robotics, and computer vision. The robotics study, in which I am most interested, has reached a leading international level at XX. Most importantly XX exalts extensive cooperation among faculty and students within ECS, in related departments on campus and with other research laboratories in companies. My own past experience shows me that cooperative research is vital to any scientific undertaking.

It is my conviction that the excellence of the faculty and the breadth of educational opportunities in XX will expose me to the best education and research training in my chosen field. In your nurturing environment, my potential will be developed and my skills honed. I will endeavor to become an accomplished computer scientist worthy of the prestige of XX.