**Program:  Biological Statistics**

If biology is the most exquisite creation by God and mathematics the language that God uses to describe the universe, then biological statistics is a wonderful fusion of the two. I believe that in constructing the great Leviathan by human intellectual enterprise, biological statistics is bound to serve as one of the cornerstones in the development of the life science. To be able to contribute to this grand enterprise has always been my innermost aspiration.

My early fascination with mathematics and biology led me to have finished self-studying such college courses of Advanced Mathematics and Organic Chemistry when I was just a high school student. I won the first prize in the XX Provincial Biology Contest and second and third prizes at national mathematics, chemistry, and Physics Olympics contests.

My distinguished performance at the highly competitive National College and University Entrance Examination resulted in my admission into XX University where I majored in Automation Control Instruments. A teacher specializing in Applied Mathematics was appointed to act as my advisor. Under his guidance, I studied, in addition to the coursework in my own specialty, Linear Planning, Nonlinear Planning, Dynamic Planning, Functional Analysis, Mathematical Modeling and other important courses for students of mathematics major. I won first-class scholarships for 4 consecutive years throughout my undergraduate career, becoming one of the five municipal-level outstanding students.  In 1997, as the top-ranking student in my class and the third-ranking student in my department, I graduated cum laude.

One special achievement in my undergraduate program was that, winning high appreciation from the professors in charge for my outstanding mathematics cultivation, I was singled out to participate in the All-China Inter-collegiate Mathematics Modeling Contest. For three days, I worked on the modeling of How to Catch Fish in a Sustainable Way. Finally, my plan received unanimous acclaim from the reviewing panel for its originality in conceptualization and rigorous design, winning the first prize in XX Province.

Ranking third in the entrance examination, I entered XX Institute of Technology to embark on my Master’s program in 1997. Specializing in Automation Control, I further developed my talent in mathematics. Apart from required courses, I studied Mathematical Statistics, Fuzzy Mathematics, Numerical Analysis, etc. Meanwhile, I consciously attended many optional courses in computer science, laying a solid foundation in software theory and application development.

In order to receive as much academic input as possible, I attended International Symposium on XX Process and Controlled XX Chain and other similar conferences. I also took part in several major research and development projects to accumulate important practical experiences. As project director, I headed the development of Railway Freight Transportation Management System in XX City, which is part of China’s National 863 Project. In developing the Management Support System of XX, the country’s super large enterprise, I was responsible for data analysis and processing in modeling. My successful modeling not only contributed to the precise prediction of future petroleum yield. It could also generate future plans and suggestions based on analysis and predictions. For this reason, my work was highly evaluated by experts from XX.

My wide-ranging R & D experience and academic involvements have considerably strengthened my ability to carry out independent research. When undertaking the graduation project for my Master’s program, I took into consideration large enterprises’ great quantity of raw data and those data’s implied information and the relative insufficiency of definite data information. I applied the XX Process Theory, Time Sequence Analysis and other data analytical approaches to realize data management and to provide support for decision-making. In my thesis entitled The Application of Unstable Process Data Modeling in Sales Predictions, I came up with advanced approaches to realize linear unstable data and conducted comprehensive analysis of the non-linear and unstable processes and the implied input variables (包含输入变量). XX Book Mansion, the largest book seller in XX, employed the research findings of my thesis and worked out a management system of sales statistics. My thesis was finally rated as “of first-class quality” by the academic committee for its unique perspectives and rigorous investigations.

As the second top ranking student of my department, I became the Outstanding Graduate of 2000. Since my graduation, I have been recruited by several major enterprises of the country. During my employment with XX Telecommunication Company and XX Telecommunication Technology Company, I have worked as technical director and project manager, participating in formulating the XX Management Standards of No. 7 Signal Directions, the National Standards of Local XX System (the 2nd Edition). I have been responsible for developing the XX Management System of No. 7 Signal Directions in XX Province, the first such system in China, followed by that in XX Province.

Over the past few years, all the projects I directed have passed at the first appraisal. This has much to do with my solid mathematical foundation and my ability to apply my knowledge of mathematics. The work I have been performing during and after my Master’s program has primarily focused on statistical analysis, during which I have build up abundant applied experience.

With those academic and career foundations behind me, I am now ready for pursuing statistics in a different field— biological statistics. As far as I know, there is still much to be improved in the mathematical analysis of biological and medical data. The first is that some methodological issues must be solved, such as the problem in XX analysis. The second is that the modeling of biological and medical statistics still needs to be perfected. In my future studies, I will concentrate on the modeling of biological and medical statistics in which I hope to achieve methodological innovations. It is apparent that the present teaching and research level in biological statistics in China is unlikely to meet my aspiration for a quality education in this field. Only the United States, the country with the most advanced biological research, can allow me to be educated in the most updated theories and practices of biological statistics and enable me to accomplish my academic and career objectives. Therefore, I have chosen to apply for a Ph.D. program in biological statistics in the University of XX.

Among many universities, I have singled out your esteemed university as best for my academic pursuit because of the in-depth research it has carried out in biological statistics, strong faculty and teaching facilities, numerous opportunities of academic exchanges. I am particularly attracted by its advanced research concepts and methodologies. I long to be a part of your university. I expect that under the guidance of reputed professors in this field I can receive systematic education in biology and further enhance my aptitudes in statistics, with special emphasis on keeping abreast with the latest developments in the international academia. I would like to expose myself to the teachings of renowned scholars and experts and participate in extensive academic activities to broaden my mind and to improve my academic qualities. Ultimately, I will synthesize all that I will have learned and seek research opportunities. My objective is that through your program I can build up a solid foundation for an academic career in biological statistics in which I can make important contributions to this exciting field of research.