Statement of Purpose

My interest in software engineer started in the first class in my undergraduate period. When *Space Shooting Game* appeared on my screen after typing a few scripts, I was totally obsessed with this miracle subject. Every time I see my programming code run successfully, I feel a familiar sense of excitement and accomplishment. Such a feeling, until now, continues to drive me into not giving up despite encountering tougher problems. My love for programming, coupled with my desire to dig down deeper into the working of various technologies and applications, propels me to continue with an MSc in Advanced Software Engineering at King's College London.

Through my four years' courses in Software Engineering at Xiamen University, I have acquired the perspective of this discipline with interests in data structures, object-oriented programming, and database system. The integrated Programming Laboratory also helped me practice my programming skills as well. In addition, I gradually realized the importance of mathematics with more projects requiring a mastery of statistics and probabilities. Therefore, I also took many mathematical courses in parallel with computer science-related ones. It is worth noting that mathematics plays a significant role in machine learning.

One experience that has prepared me for a higher-level education is my undergraduate thesis work with NLP in Python, where I have systematically applied Fuzzy Matching Algorithms to a knowledge service platform and achieved over 94% accuracy. The motivation for the project came from my own practical need -- to find a large number of research papers and other scientific documents for my research. However, searching for materials is always a headache issue. But my algorithm makes it possible for users to quickly search for references and similar journals by using only one or two relevant simple words in the platform. Technical challenges aside, this project taught me how to work on and maintain a long-term project building on knowledge system over the years. Apart from building various NLP models and tedious QA process to solve problems, I also found it important for a computer science student to find and identify intricate problems through applying existing ideas. Such fulfillment and satisfaction that the idea comes true will definitely help me continue researching new ideas and working on good algorithms in my graduate study as well.

Aside from the projects I have done back in school, it was my passion to become exposed to the software industry, and this motivated me to take internships and training. During my undergraduate, I started to work in Tencent, the largest Internet company in China, where I was allowed the opportunity to see how things actually work in a professional environment. I have worked as an intern under the Platform Architecture Group. The project, whose primary goal was to provide a business travel management system in order to optimize company's budget on business trips influenced me most. To catch up with what my team was working on, I must learn Aurora, a new application framework based on J2EE in a short time. I made great progress by developing JAVA code upon functional and non-functional requirements, and unit test codes to ensure all requirements were met. In the meantime, I actively participated in code reviews to both improve my programming skills and effectively communicate with other developers, business analysts, quality control and across other technology team boundaries. Working as a professional, I believe that I have a broader and more realistic perspective of both software development and database than the average student. But it is the internship experience that made me realize the gap between an expert and myself, and thus I am determined to pursue a master's degree.

Holding a belief that balancing life and study could provide a higher quality of work, I also became the president of the Young Volunteer Association in Software School at Xiamen University. To better serve the society and members, I have organized several activities together with our community, such as teaching older people to use computers and enrich their retirement life, attracting hundreds of people every time. Learning more about their life, I would like to continuously volunteer such services in the future. Hopefully, I can develop some applications to make them learn new technology easier and faster.

My bachelor's degree and the experience as a software developer are promising but evidently not enough. A master's degree is an excellent choice for me to continue my dream as a successful software engineer. King's College London has a good reputation for its top 33rd place by QS World University Rankings and has educated significant contributors to the field. Apart from the core curriculum, optional courses provide me with a customized study path. And I am particularly interested in the *Agents & Multi-Agent Systems* and *Big Data Technologies* courses, which serves a great extension to my undergraduate research. My study in this program will enable me to acquire skills to develop software systems that are reliable and useful. I hope that I will get a chance to study and work alongside other talented researchers to have my potentials in software engineering further tapped. A master's degree from this prestigious program would provide opportunities for me and offer an abundance of pertinent knowledge for applicable use. I cannot wait to join your program. Thanks very much for your favorable consideration.