Personal Statement

I would like to say that studying at South China University of Technology as an undergraduate student majoring in Electrical Engineering & Automation (freshman and sophomore years) and Computer Finance -- Financial Technology (junior and senior years) is a very meaningful experience in my life. Nearly four years of systematic training has not only endowed me with a solid foundation of fundamental knowledge and professional skills, but also cultivated and refined my interest in using computer technology to gracefully solve engineering problems. For example, I can use algorithms to predict the number of COVID-19 infections, even better than traditional infectious disease engineering. To fulfill my long-term goal of becoming a competent engineer and engaging in putting myself firmly on the cutting edge of scientific development, I am determined to embark on a new learning journey, hoping to develop a broader perspective and gain exposure to in-depth knowledge and expertise IN Computer and Information Engineering.

I have demonstrated a keen mind since my early childhood. For years, I consistently outperformed all of my classmates in such challenging subjects as mathematics, physics and computer. With full passion and determination, I started my college life at South China University of Technology, a leading university known as its strong background in the area of engineering in China. Through four years of college, I not only learned basic electrical engineering knowledge & programming languages such as *C* and *Java*, but also formed my own profound thinking about compuer science. After learning *Java Advanced Development* and carrying out some course projects, many of my skills, such as quantitative ability, analytical ability and logical thinking ability, have been greatly improved. The course *Machine Learning* has enlightened me of the basic facts about machine learning principles, such as optimization algorithm, convex analysis and deep learning, as well as its application in real work. Besides studying earnestly in university, I also enjoy the process of reading the literature related to computer and information engineering, not only to constantly replenish my knowledge, but also to cultivate my patience when the research is not progressing.

I always believe that a good engineer can combine theory with practice and convert the former into the latter well with his/her capability. In 2018, I participated in the high-voltage leakage detection project of Guangzhou Power Supply Bureau and was responsible for the development of leakage detection equipment, where I successfully developed the leakage detection system based on Arduino single-chip microcomputer. From September 2020 to now, I am responsible for Google Cloud Platform (GCP) software development in HSBC Guangdong Software Development Center, which offers me a solid foundation for implementing my idea into reality in my subsequent career. However, the four-year undergraduate study and related project experience are still not enough to allow me to have a deeper understanding of the areas of interest. There is no end to learning. Shaped by my previous study, I would like to pursue a master degree in Computer and Information Engineering.

Chinese University of Hong Kong (Shenzhen) is one of the most influential universities in the world, respecting for students as further demonstrated by its flexible curriculum which would allow me to tailor the courses to meet my needs and interests undoubtedly fascinate me and can lay the foundation for my future research. The vigorous academic environment and renowned faculty convince me that I will make a breakthrough in my field and become an excellent researcher after being polished by your graduate program. What’s more, Shenzhen is a great city, where there are not only the most outstanding Internet technology companies in China, but also

dozens of new energy vehicle companies. I think I can find a suitable direction in Shenzhen for the combination of computer and new energy technology.

My future goal is to try to use algorithms, modeling and simulation to solve engineering problems, and become an engineer-oriented computer scientist. Pursuing a master degree in Computer and Information Engineering is the first step towards my goal. After I graduated, I am planning to pursue a doctor degree at CUHK to continue my research, continue to engage in the research of computer technology on electric energy and other new energy sources, such as the design of new power battery structures through modeling and simulation, or the optimization of existing power battery structures through algorithms. I really hope my research direction can affect and benefit more people. With your school's training and guidance, I am confident I can realize this goal.