Personal Statement by Qizhi Guo

Out of keen interest and great passion in chips, the brain of various electronic products, I am frightfully eager to study electronic engineering in my graduate stage, hoping to furnish myself with more advanced knowledge and skills to pave the way to my career goal of engaging in the research on high integration chip and embedded system in Xiaomi Technology Co., Ltd or Semiconductor Manufacturing International Corporation (SMIC) after my post-graduation. Therefore, I am taking this precious opportunity to apply for the programme XXX in your celebrated XXX University, which I am assured will certainly help me turn my superficial determination into the reality.

To my knowledge, if I want to be admitted into your university and catch up with your curriculum progress, a sound theoretical foundation, strong experimental ability as well as extraordinary learning ability are indispensable. The four-year undergraduate study of Mechatronic Engineering in China Agricultural University, a subject that covers many aspects including machine design, electronic engineering, automatic control, computer technology, information communication and electric engineering etc., has greatly broadened my knowledge scope and enables me to ponder the problems from different angles and directions. For instance, once I independently conducted an obstacle avoidance experiment of intelligent car, which requires the knowledge about sensor, automatic control, machine design, and analog electronics technique etc. Therefore, I am convinced of my comprehensive academic background will better serve for my graduate study.

Besides, in terms of professional knowledge related to electronic engineering, I do not ignore it either. From electrical technology to digital circuit and analog circuit, I gained a comprehensive understanding of amplification circuit and the skills of using them skillfully; from the theories of microcomputer to the principles of single chip computer, I laid a firm foundation to in-depth study integrated circuit; and the learning of relevant software and computer skills also benefited me a lot, such as using MATLAB to process data and generate the images, employing Keil to program to drive MCU so as to achieve specific functions, as well as conducting experiments via AutoCAD, SolidWorks, Edgecam, RoboDK, Proteus, and myDAQ, and the like. More importantly, for the sake of gaining more understanding of integrated chip, I proactively took advantage of my spare time on consulting related papers, which provides me with many cutting-edge concepts and technologies.

Apart from the theoretical accumulation, completing curriculum design and experiments like virtual simulation experiment, electrical technology experiment and application experiment of single chip computer, etc. are also a vital part of my undergraduate study. When carrying out relevant design, I will not merely complete specific functions, but also figure out the basic functions and internal logic circuit of each used component by watching videos, which enables me to better understand the working principles of an electronic product. Among all the experiments, the most beneficial one was designing the electronic coded lock. In this project, I together with another two fellows not only wrote the delay program, changed the password subroutine, and wrote the digital tube display subroutine program to achieve the established function, but more importantly optimized privacy issues when entering passwords by using symbols to replace the figures. Eventually, STC89C52 chip is employed as the control core and meanwhile we realized the key input password unlock function and error alarm function. Through this project, my cooperation ability, experimental skills and problem-solving capacity have been strengthened greatly that will be conducive to my further study and future career development.

Additionally, other than academic achievement, it is still worth mentioning that my experience during the outbreak of COVID-19 has cultivated my persistence and self-control ability. During the epidemic, I encountered unprecedented pressure both spiritually and psychologically because of the worries about my parents as doctors and my learning stress from online classes. Instead of being beat down by difficulties, I insisted on following my school schedule, taking notes carefully while having classes, and completing the coursework earnestly, and more importantly firmly believe in my parents. Under my unremitting efforts, not only did I obtain the highest score during my undergraduate study, but my confidence to have a better performance in the future has been enhanced.

Although I have equipped myself with a solid theoretical foundation and research competence, I deeply know that it is far enough for me to support my career goal of working in Xiaomi Technology Co., Ltd or SMIC. Your distinguished university, with intense academic atmosphere, world-class electronic technologies, as well as rich cultural background, attracts me most. Therefore, I am very eager to study the progremme in your university. After graduation, I will try my utmost to enroll my ideal companies, aiming to master the key technology and enter the key project team within 3-5 years and then strive to be promoted as the project leader to develop products with new technologies within 5-8 years. Therefore, I sincerely hope you can favorable consider my application.