Purpose Statement

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Interests: Electrical and Computer Engineering, Robotics, Signal Processing System
Affiliated Institution: University of Nottingham, Ningbo, China

I am currently a final year undergraduate in the University of Nottingham, China Ningbo Campus, majoring in Electrical and Electronic Engineering. Our campus of the University of Nottingham carries a complete British education, where English is the official working language.

During my undergraduate education, the professional and research-oriented engineering program inspired me to investigate further and deeper in the field of Electrical Engineering, including contemporary signal processing System, interdisciplinary Robotics, and modern computing modules such as embedded system and computer engineering.

My goal is to become an expert in Electrical and Computer Engineering filed including an experienced engineer and an insightful researcher. Therefore, a master's degree will benefit me in both choices.

My passion for Electrical and Computer Engineering is developed gradually through my whole four-year undergraduate study. In my freshman year study, I had acquired solid academic English abilities both in writing and speaking so that I was capable of reaching to the state-of-art technological information including Electrical Vehicle, Robotics, and Artificial Intelligence.

In the later year2 fundamental program, I was enlightened to investigate the image processing field by constructing an auto-navigate electrical vehicle using Raspberry Pi and Arduino. Later, I joined the University Robotics Team as a member of visual computing group for auto-aiming function. So far, I have dived further and wider into Electrical Engineering filed and gained invaluable project experience.

Furthermore, I came across signal processing and embedded system in my third-year project. Although I participated both in power and control energy system project and electronic embedded system project at the same time, I found it is my pleasure and passion to communicate with hardware and software using magic programming language and well-trained mathematic methodology. The proper outputs of whole system provide me a sense of achievement, which encourages me to research further and design more advanced devices that interact and perform better.

As an extent summer research, focusing on audio speech processing using Python, I choose a graduate project which combines hardware (FPGA) and software together (C/C++ and VHDL) to drive hardware acceleration on signal processing and machine learning area. This project not only has met my initial expectation that communicating and interacting with both hardware and software, but also can guide me into modern emerging area where machine learning is the dominating strategy of signal processing. I believe the solid and strict requirements of this project and previously taught materials will benefit me in later study and working.

Although I have well trained and practiced in fundamental skills, I am still lacking

advanced trouble shooting skills and knowledges, especially in machine learning, signal processing and hardware devices operation. Therefore, I am pursuing a higher degree that can provide me with unique skills and enhance my employment competitivity.

University of Michigan is one of the most inspiring and leading institutions in Electrical and Computer Engineering over the world. The division of Signal & Image processing and Machine Leaning provides various cutting-edge courses and training. The Annan born city is also a place fulfilled with pleasure and peace which benefits for my academic study. At the same time, the great reputation of UMichi can enhance my career capability in my later life, it is also a great choice continue my academic research as a PhD candidate in such a leading environment and work with the most talented and motivated professors and faculty. Therefore, applying for ECE master program in University of Michigan Ann Arbor is the best choice meets both my industry career and academic career.