## **Purpose Statement**

Name: Jiajun Hu

Interests: Intelligent System, Complex Adaptive System

Affiliated Institution: University of Nottingham, Ningbo, China

I am now 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 systems, interdisciplinary Robotics, and modern computing systems such as embedded system and computer engineering.

I have undergone an embracive and solid academic English ability training in my first-year study, which favors me a lot diving into Electrical Engineering area further. In the later year2 and year3 education periods, I accomplished several embedded-system based projects including Auto-navigate vehicle using Arduino and Raspberry Pi and doppler-effect based speed detector using Xilinx FPGA and STM32L. By these projects, I have viewed and experience conventional signal and image processing skills. However, the emerging Al and machine learning area provide me a view of Al powered intelligent system, in which the data and signal can be processed more intelligently and finally achieve the industry intelligentization.

Furthermore, I have engaged in an AI supported audio processing project. In the last summer vacation, I have jointed a research program focusing on Audio speaker classification, and then I continued following it up as my graduation project and dissertation combining AI and FPGA together to achieve a practical industry embedded AI function.

Since AI is so significant and drives emerging demand, continuing my research and study in AI related engineering area not only meets my interests and strength but also provides me considerable employment opportunities. Therefore, I am aiming for a more advanced education program that equips me with strong and solid AI knowledge and then guide into deeper and more practical application in a complex engineering system.

Australia National University is one of the leading research-based universities, and Australia is one of the most fantastic and developed countries that full of career and research opportunities in the world. Studying and living in such an attractive institution will be an invaluable experience. Also, the unique research and internship project of this program provides me the chances to get in touch of world-leading invention of tech companies acquiring industry research and development experiences. Thus, applying master's program related in Al application in ANU is an wonderful choice that favors my personal career goals and aboard living experiences.