

## **Purpose Statement**

**Name:** Jiajun Hu

**Interests:** Intelligent System, Complex Adaptive System

**Affiliated Institution:** University of Nottingham, Ningbo, China

Now I am 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 embrative and solid academic English ability training in my first-year study, which is the foundation 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 AI and machine learning area provide me a view of AI 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-based signal processing project. From 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 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.

Chalmers University of Technology is one of the leading technology universities, and Goteborg is one of the most energetic cities that full of creativities with edge high-tech companies in the world. Studying and living in such an attractive institution will be a fantastic experience. Also, the unique close relation between industry and university provides me the chances to acquire industry research and development experiences. At the same time, the origin place of Nobel Prize will enlighten my views in the prospective of all human evolution and civilization progress. Thus, applying master's program related

in AI application in TU Chalmers is a wonderful choice that favors my personal career goals and aboard living experiences.