**Purpose Statement**

**Name: Jiajun Hu**

**Interests: Intelligent AI 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 embracive 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. 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.

However, with technology becoming more advanced engineering system will become more and more complex and embracive simultaneously. It is essential for engineer and researcher to know about interdisciplinary knowledge and applications. Thus, continuing my research and study in and synthesized adaptive engineering area, where multiple disciplines come across together and enlighten each other, 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 related and interdisciplinary knowledge and then guide into deeper and more practical applications in a complex engineering system. Through such a program, I may be equipped with various interdisciplinary knowledge and enabled to choose and investigate the possibilities of different combined application then do some real impact in society.

Sweden is a highly developed country full of cutting-edge technologies and innovation environment. 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. Thus, applying master’s program related in complex and AI application in TU Chalmers is a wonderful choice that favors my personal career goals and aboard living experiences.