Yunxue Pan

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EDUCATION

The University of Manchester **Manchester**

Major: Robotics 09/2024 - Present

Donghua University **Shanghai**

Major: Automation **GPA**: 3.73/5.0 **Ranking**: 18/180 09/2020 - 06/2024

Core Modules: Automatic Control System (93), Computer Control Technology (92), Introduction to Artificial Intelligence (90), Analog Electronics (88), Digital Electronics (84), etc.

RESEARCH EXPERIENCE

Project 1:Leo Rover Group Project **09/2024-Present**

- ✓ Developing motion planning algorithms to enable precise object grasping.Worked on special campaigns and surveys of system users
- ✓ Implementing control strategies to ensure stable and accurate arm movement.
- ✓ Integrating perception data to enhance object recognition and positioning.
- ✓ Optimizing the grasping and transport process for efficiency and reliability.

Project 2: Development of A Student Information System **09/2022-11/2022**

Researcher, *Supervisor: Prof. Tao Gong*

- ✓ Cooperated with team members to design the system focused on recording and updating the student data
- ✓ Worked on special campaigns and surveys of system users
- ✓ Used HTML and Java to create front-end pages and called student information in the MySQL database
- ✓ Identified flaws in the design of the system and created solutions to ensure smooth roll-out of the final product
- ✓ Created multiple tracking tools to identify load errors or missing pages within the student system

Project 3: Design of Electronic System for Subject Reaction Time Recording Based on FPGA **07/2022-08/2022**

Researcher, *Supervisor: Dr. Genlong Chen*

- ✓ Designed a physiological reaction time tester utilizing Intel (Altera) programmable device development platform Quartus II software and some common digital circuits based on FPGA
- ✓ Simulated the model characteristics and the proposed algorithm with the mathematical equations using MATLAB environment
- ✓ Examined the system performance
- ✓ Proposed some solutions to simplify the system based on the design constraints for hardware implementation of digital controller on FPGA
- ✓ Completed the report to explain the design principles and working methods of the system

Project 4: Design and Production of Mobile Shooting Robot 'Hero' **10/2021-06/2022**

Principal Electronic Controller, *Supervisor: Prof. Yujie Chen*

- ✓ Formulated the system design by collecting and studying relevant cases
- ✓ Cooperated with team members to write the program for robot shells launching
- ✓ Completed the PCB design and pattern making of the voltage conversion module
- ✓ Debugged the parameters of the robot's movement to enable it to achieve over 50% hit points
- ✓ Applied negative feedback control methods such as speed loop and angle loop to write control programs
- ✓ Performed hardware and software integration, verification, and sustaining engineering efforts

AWARDS & HONORS

University Level Second Class Scholarship	12/2022
Third Prize in the 21st National College Robot Competition	08/2022
Second Prize of 2022 RoboMaster Super Competition Regional Competition (Eastern Division)	06/2022
Academic Excellence Award	11/2021

SKILLS & INTERESTS

Computer Skills: Proficient in C, C++, MATLAB, LabVIEW, STM32CubeMX, Altium Designer，**ROS2**

Language: IELTS 6.5