YUNXUE PAN

Female | 23 | IELTS 6.5 | CET-6
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Education

The University of Manchester QS35 **Msc Robotics** 09/2024-12/2025

Core Courses: Robot Systems; Cognitive Robotics and Computer Vision; Fundamentals of Machine Learning; etc

Donghua University 211 **BEng in Automation** 09/2020-06/2024

GPA：3.74/5.00 (Top 10% in Major)

Core Courses: Principles of Automatic Control; Modern Control Theory; Process Control Systems; etc.

Project Experience

Design of Imitation Learning Strategy for Obstacle-Avoiding Robot Grasping 06/2025-09/2025

- Project: Designed imitation learning strategies for Franka Emika Panda robotic arm in obstacle-rich environments using **robosuite**. Focused on enhancing grasping stability through data and model optimization.
- Technical details: Built PickPlaceCanWithObstacle scenario; collected/processed two datasets (obstacle-free/obstacle-rich) for training; implemented **BC, HBC** and **MHA**-integrated HBC models, comparing their performance.
- Responsibilities: Independently set up environment, handled data processing, developed all three models and analyzed results.
- Achievements: Optimized HBC model achieved 0.72±0.04 success rate (up from 0.49±0.08), validating effectiveness of data and architecture improvements.

Design of Leo Rover: Autonomous Obstacle Avoidance, Recognition and Grasping Robot 09/2024-05/2025

- Project: Developed an intelligent mobile robot on Leo Rover platform, integrating target recognition, path planning and robotic arm grasping.
- Technical details: Used **Gazebo** for simulation; obtained object positions via depth camera; implemented end-effector pose control through inverse kinematics; with hands-on experience in **SLAM** algorithms and path planning processes.
- Responsibilities: Led robotic arm module development/control; achieved system integration and execution via **ROS2**; designed multi-module communication for task scheduling.
- Achievements: Stable recognition, avoidance & grasping (sim/real); ±0.8mm arm accuracy; system ran steadily.

RoboMaster Robot Design (University Competition Project) 10/2021-08/2022

- Project: Designed control system and launching mechanism for competition robot.
- Technical details: Developed **PID** control algorithms in C; built speed/angle loops; independently tuned parameters, improving hit rate from 60% to 90% via 10+ iterations.
- Responsibilities: Handled core control algorithm coding and hardware work including **PCB** routing/ packaging.
- Achievements: Launch module contributed over 50% of team's score, helping win **National Third Prize in RoboMaster**.

Internship Experience

Ronovo (Shanghai) Medical Technology Co., Ltd. Electrical and Electronic Engineer Assistant 03/2024-06/2024

- Independently tested 100+ medical device circuit boards (100% continuity accuracy, voltage error ±0.05V max); identified dozens of interface anomalies, assisted troubleshooting, and ensured assembly progress.
- Analyzed PCB schematics for pin logic/abnormal connections; proficient in comparing physical components with circuit diagrams.

Honors and Awards

First-Class Scholarship, Donghua University (2023)
Second-Class Scholarship, Donghua University (2022)
Academic Excellence Award, Donghua University (2021)
National Third Prize in the 21st **RoboMaster** Competition (2022)

Technical Skills

Proficient in ROS2, Gazebo, Mujoco, Python
Skilled in C, PLC, Matlab