OU, TING-WEI（歐庭維）

- NYCU M.S. in Robotics (EE605 Human and Machine Lab) 碩一
- R&D Engineer @ Hong Long Technology Co., Ltd.

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EDUCATION

NYCU Class of 2023
- M.S. in **Robotics**
- Research Interest :

1. Visual SLAM
2. Mobile Robot
3. Computer Vision

NCTU Class of 2019
- B.S in **ME**
- GPA : 3.85/4.30
- Research Interest :

1. Mobile Robot
2. SLAM
3. Indoor positioning

SKILLS

Robotics:
- ROS
- C / C++
- Python
- Git
- STM32- Cortex M4

Mechanical:
- AutoCAD
- CAM
- Solid Works
- CNC-gcode
- Machining Certification
- CAD Certification
- 3D Modeling Certification

PROFESSIONAL EXPERIENCE

Part-time R&D Engineer @ Hong Long Technology Co., Ltd.
- Project Name: Development of Software System for Traditional Industry Automation.
- Project Goal: Fulfilling customer requirements / Path planning for robotic arms

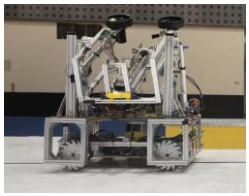
Team Leader @ NCTU iTron Robotics Team
- Project Name: Control and Design of Mecanum Wheeled Chassis.
- Project Goal: Integration of Lidar Localization Algorithms and Robot Control.

Research Student @ NYCU Networked-Control-Robotics-Lab (程登湖教授)
- Project Name: Learning drone control knowledge and applying CBF.
- Project Goal: Learning about drone control and simulation.

PROGRAMMIMG EXPERIENCE

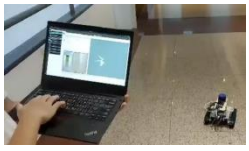
◆ **26th TDK Robotics Competition**

In this project, I am responsible for integrating the robot's Lidar localization algorithms (Hector SLAM) and the onboard computer (ROS) with the control of the Mecanum Wheel chassis, enabling the robot to meet the mobility requirements for the competition.



◆ **Microprocessor Side Project**

In this project, I use the STM32-F407 as the robot's microcontroller, responsible for computing basic functions like PID control and speed control. I also package data from encoders, temperature, and humidity sensors using UART communication protocols and send it back to the central computer (Raspberry Pi + ROS). The robot is then remotely controlled from a computer to perform basic exploration tasks.



RELEVANT COURSEWORK

- Robotics(A+), Microprocessor (A+), Automatic Control (A), Computer Programming (A+), Data Structure (A+), Python Programming (A+)

EXPECTATIONS FOR THIS COURSE

- Learn about the sensors, algorithms, and decision-making processes involved in autonomous vehicles.
- Gain insights from the professor's experience in the field of autonomous vehicles.
- Apply the knowledge acquired to future research.