

# YU-LUN CHOU

Email: b07502075@ntu.edu.tw | Phone: +886-9-70819587

## OBJECTIVE

As a fresh graduated student having expertise in Mechanical Design and Control Engineering, aspiring to pursue a Master's degree in Department of Mechanical Engineering for Spring 2024 at Tohoku University in Japan.

## EDUCATION

**National Taiwan University (NTU)** **Sept. 2018-Jan. 2023**, Taipei, Taiwan

- BS in Mechanical Engineering, GPA: 4.03/4.3 (last-60-credits)
- Exchange Student Program at Aoyama Gakuin University in Japan (duration: Sept. 2022-Jan. 2023)
- Related Coursework: Automatic Control Theory, Mechanism (Kinematics), Dynamics, Computer Programming, Practice of Mechanical Engineering, Machine Design Theory, Data Structure (In Japan)

## HONORS & AWARDS

First Robotics Competition (FRC) Sacramento Regional Finalist (as team's youth mentor)	Mar. '22
Taiwan TDK Robocon UAV group Championship (Sponsored by TDK Corporation)	Fall '21
Presidential Award (top 5% of the class in the semester)	Fall '20

## RESEARCH & WORK EXPERIENCE

**Researcher in Autonomous & Soft Robotics Laboratory - ME Dept. at NTU** **Mar. 2023 - Present**

Advisor: Prof. Chung-Hsien Kuo (NTU)

- Continuing the research in SLAM using TurtleBot to achieve localization, navigation, and exploration.

**Intern in Intelligent Robot and Automation Lab - EE Dept. at NTU** **Mar. 2022 - Aug. 2022**

Advisor: Prof. Li-Chen Fu (NTU)

- Researched on mobile robot using mapping algorithm Hector SLAM to extract internal map.
- Acquainted with Robot Operating System, Linux, and relevant algorithm for AMR from scratch.

**Youth mentor of team C.K. Robotics at Chien Kuo High School** **Feb. 2022 - Aug. 2022**

- Guided 30+ students to fabricate and optimize the FRC Robot that performed assigned missions.

**2021 Taiwan TDK Robocon (TDK Cup 25<sup>th</sup>, UAV group)** **Jul. 2021 - Dec. 2021**

- Designed the structure and layout of drones and communicated with manufacturers.
- Reconstructed and arrange the practice field to manipulate drones in school.

**Practice of Mechanical Engineering project: Propeller-Powered Vehicles** **Spring '21**

- Designed the vehicle's structure and steering mechanism.
- Tuned PID controllers to make sure Robot arrive goal successfully.

## SKILLS

**Hardware/Development Environment/Language:** Arduino, Raspberry, ROS, Linux, Python, C++

**Mechanical:** SolidWorks, Autodesk Inventor, AutoCAD; CNC Operation, 3D printing, Laser cutting