# Zheng-Yan Wu

Github Website Linkedin Email

## **EDUCATION**

#### **National Taiwan University (NTU)**

Taipei, Taiwan

M.S. in Mechanical Engineering (Program of System Control)

Sep 2021 - June 2022

• GPA:4.12/4.3

Researcher at the NTU Robotics Lab focusing on SLAM, Computer Vision and LLM

#### **National Taiwan Normal University (NTNU)**

Taipei, Taiwan

B.S. in Eletrical Engineering (Double Major)

Sep 2018 - June 2021

#### National Taiwan Normal University (NTNU)

Taipei, Taiwan

B.S. in Mechatronic Engineering (Main Major)

Sep 2017 - June 2021

GPA:4.10/4.3

• Graduated with College Honors and received two Presidential Awards

## **EXPERIENCE**

#### Summer Intern at SEYI

Taoyuan, Taiwan

Mechanical Engineer

July 2019 - August 2019

• Developed a multifunctional measurement program using LabVIEW, enabling signal acquisition of vibration acceleration, displacement, temperature, and pressure, along with features for data visualization, database management, and spectral analysis.

#### **Teaching Assistant at NTU ME Automatic Control**

Taipei, Taiwan

Teaching Assistant

September 2022 - December 2022

• Guiding students to understand feedback principles, control systems design, and system stability.

#### Teaching Assistant at NTNU ME The Principles and Application of Sensors Taipei, Taiwan

Teaching Assistant

September 2020 - January 2021

• Guiding students to understand the principles and design of various sensors, and using Pspice to design a sensor circuit and implement it.

#### Teaching Assistant at NTNU ME Labs of Digital Logic

Taipei, Taiwan

Teaching Assistant

February 2020 - June 2020

• Guiding students to cultivate the ability to write Verilog HDL and utilize Quartus for synthesizing circuits and programming them onto the DEO Nano Cyclone platform.

#### **Teaching Assistant at NTNU ME Computer Programming**

Taipei, Taiwan

**Teaching Assistant** 

September 2019 - January 2020

• Guiding students to cultivate foundational programming concepts and proficiency in C/C++ language coding.

## **PROJECTS**

## Microsoft - Light-Weight Facial Landmark Prediction Challenge

- High-accuracy prediction of 68 2D facial landmarks
- Achieved with high efficiency and minimal computational costs

#### **Point Cloud Semantic Completion**

- Restoring broken and incomplete 3D point cloud objects
- Enhancing quality, integrity, and detail precision using semantic part information

## Play Table Hockey with a 5-DoF Mechanical Arm

- Tracking the dynamic hockey ball using the Realsense d435i RGB-D camera
- Employing inverse kinematics with Kalman Filter-predicted ball coordinates to guide the robot arm's movement within its reach.

## **SKILLS**

### **Technical Skills**

Languages: Python, C, C++, C#, MatlabTechnologies: Git, Pytorch, Docker, QT

#### Languages

• Native: Mandarin, Taiwanese

Proficient: English Basic: Japanese