

## EDUCATION

### National Yang Ming Chiao Tung University

*Master of Data Science and Engineering*

**09 2024 - Present**

Hsinchu City, Taiwan

### National Chung Cheng University

*Bachelor of Science in Communication Engineering - GPA - 3.99/4.3*

**09 2020 – 01 2024**

Chiayi City, Taiwan

- **3 Presidential Honor Award**

## WORK EXPERIENCE

### Synology

*Backend Engineer Intern*

**01 2024 – 04 2024**

New Taipei City, Taiwan

- Developed 10+ camera APIs for the NAS surveillance system (20,000,000+ downloads) to enhance control features in C++

### National Academia Sinica

*Researcher Intern | Skills: Reinforcement learning*

**07 2023 – 08 2023**

Taipei City, Taiwan

- Computer Olympiad Gomoku **4th**
- Boosted AlphaGo's **win rate to 99%** by integrating threat-space search and KataGo

## AWARDS

### Competitive Programming Contest | Skills: Data Structure and Algorithms

- **ICPC 2021 Asia Taipei Regional Site Bronze Award**
  - \* Won a coding competition with **300+ participants**, organized by NTUB
- Collegiate Programming Examination
  - \* Accomplished a 6/7 problem solution rate, ranking 24th out of 2300+ participants.

### Deep Learning Contest | Skills: Machine learning

- AI CUP for Orchid Species Identification and Classification Competition
  - \* Achieved **70% accuracy rate** by **PyTorch**
  - \* Outperformed **90% teams** in class, organized by Ministry of Education

## PROJECTS

### Enhancing BBR Algorithm in Coexistence with CUBIC | Skills: Networks

- Devised BBR-S, a novel algorithm for detecting BBR presence, ensuring improved fairness using scaled squared difference approach (**1/900**) by **C++**, **NS3**

### Physics Simulation Experiments Website | Skills: Frontend

- Designed a website to display physics experiments by **HTML**, **CSS** and **JavaScript**
- Used by **300+ students** yearly

### Infrared Transmission with Hamming code | Skills: Embedded system

- Achieved **100% accuracy** for transmitting **10K+ characters/s** within planned time by **C**, **MCU**

## TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, HTML, CSS

Developer Tools: VS Code, Google Colab

Technologies/Frameworks: Linux, Git, PyTorch, Docker, Vue, NS3

## COURSEWORK

- |                                     |                         |                         |
|-------------------------------------|-------------------------|-------------------------|
| • Data Structures (A+) & Algorithms | • Operating Systems (A) | • Probability (A+)      |
|                                     | • Microprocessor (A+)   | • Computer Networks (A) |