Kuo, Nai-En

https://imgradually.github.io/

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EDUCATION

University of California, San Diego — La Jolla, CA
Master of Science in Computer Science and Engineering; Incoming student — *Sept. 2023 – Jun. 2025*

National Yang Ming Chiao Tung University — Hsinchu, Taiwan
Graduate study in Network Engineering; GPA: 4.25/4.3(Credit: 21) — *Feb. 2021 – July. 2022*

National Chiao Tung University — Hsinchu, Taiwan
Bechlor of Science in Computer Science; GPA: 3.67/4.3(Credit: 138) — *Sept. 2017 – Jan. 2021*

JOB EXPERIENCE

Taiwan Semiconductor Manufacturing Company(TSMC) — Hsinchu, Taiwan
Software Engineer Intern — *July 4, 2022 - Sept 2, 2022*

- **System migration**: I containerized and migrated an existing system from a virtual machine to Kubernetes.
- **Job dispatcher**: I designed a Java Spring Boot job dispatcher program, enhancing system efficiency, handling exceptions, and resolving halting situations. After a thorough CI/CD process with unit tests, it launched successfully to production, effectively mitigating worker machine idleness to precisely half or less.

DBS Bank, Taiwan — Taipei, Taiwan
Software Engineer Contractor — *July 6, 2020 - Jan 31, 2021*

- **Real-time speech emotion recognition**: I researched real-time speech emotion recognition using PyTorch and transfer learning techniques, with the aim of fraud detection and patent application.
- **Talent Data Collector**: In response to the engineer recruitment plan, I developed a talent data collection program using Python and Selenium to efficiently collect online data and generate user-friendly reports, effectively reducing the workload of our recruiters.
- **Phone dialing Line Chatbot**: Line is a popular instant messaging app in Taiwan. I developed a phone dialing Chatbot using Heroku and Twillio to facilitate communication between the call center and IT department, and to call the duty officer during emergencies.
- **AWS Deepracer**: We promoted AWS DeepRacer to all colleagues and encouraged participation in online training competitions. Moreover, I actively served as a staff member for DeepRacer physical races.

COMPETITIONS

2021 Mei-Chu Hackthon — Online
2nd place *of Micron Technology, Team of 4: DuckBubi.* — *Oct 23-24, 2021*

AIS3 EOF CTF 2021 — Taipei, Taiwan
Rank: *10 in Final round, Team of 4: TLSC.* — *Feb 6-7, 2021*

2021 Microsoft x TSMC IT CareerHack — Online
Work of my team of 4: https://github.com/wiiwu959/MR-Cooking-Emulator — *Jan 24-25,2021*

2020 ICPC Asia Taipei-Hsinchu Site Programming Contest — Taipei, Taiwan
Bronze medal*, Team of 3: NCTU_KokushiMusou* — *Nov 07, 2020*

2020 Mei-Chu Hackthon — Hsinchu, Taiwan
3rd place *of Line Corp., Team of 4: 4Fun. https://github.com/taipeiyuka/line-liff-4FUN* — *Oct 24-25, 2020*

COURSEWORK PROJECTS

- **Multifunctional Aerial Gazer**: I developed a Python-controlled drone capable of tracking face and gestures.
- **SAT solver**: I implemented a DPLL-based heuristic alogrithm with advanced features to solve SAT problem.
- **P to RISC-V compiler**: I built the compiler from scratch using lex, yacc, and C++.

PROGRAMMING SKILLS

- **Languages**: Python, C/C++, Java, Javascript, PHP, HTML/CSS, SQL, P4
- **Technologies**: Kubernetes, Git, Spring Boot, Azure, Unity, Linux, Docker, Google Cloud, AWS, Qiskit