

# Kuo, Nai-En

<https://imgradually.github.io/>

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## EDUCATION

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- **University of California, San Diego** La Jolla, CA  
*Master of Science in Computer Science and Engineering* 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  
*Bachelor of Science in Computer Science; GPA: 3.67/4.3(Credit: 138)* Sept. 2017 – Jan. 2021

## EXPERIENCE

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- **Taiwan Semiconductor Manufacturing Company(TSMC)** Hsinchu, Taiwan  
*Software Engineer Intern* July 4, 2022 - Sept. 2, 2022
  - **System migration:** To migrate an existing system from virtual machine to Kubernetes.
  - **Dispatcher program development:** To resolve existing problems that occurred in the production environment.
- **National Yang Ming Chiao Tung University** Hsinchu, Taiwan  
*Teaching Assistant* Oct. 2021 - June 2022
  - **Applications of Machine Learning for Networking:** Course Syllabus Link
  - **Network Programming:** Course Syllabus Link
- **DBS Bank, Taiwan** Taipei, Taiwan  
*Software Engineer Contractor* July 2020 - Jan. 2021
  - **Real-time speech emotion recognition:** To research for fraud detection and patent application.
  - **Talent Data Collector:** To efficiently collect online talent data and generate user-friendly reports.
  - **Phone dialing Line Chatbot:** To facilitate communication between the call center and IT department.

## COMPETITIONS

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- **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

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- **Multifunctional Aerial Gazer:** I developed a Python-controlled drone capable of tracking face and gestures.
- **SAT solver:** I implemented a DPLL-based heuristic algorithm 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

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

## PUBLICATION

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- **S.Y. Wang and N.E. Kuo. Using programmable p4 switches to reduce communication costs of parallel and distributed simulation:** In 2022 IEEE Globecom, 2022.