

CONTACT INFORMATION	No. 79, Xintai St. Nanzi Dist., Kaohsiung City 811 Taiwan (R.O.C.)	Mobile: (+886) 910-736-446 LinkedIn: www.linkedin.com/in/jc-hiroto ✉ E-mail: jc.phchang@gmail.com
EDUCATION	National Taiwan University (NTU) , Taipei, Taiwan 2018 - 2022 (expected) <ul style="list-style-type: none"> • B.S.E in Department of Engineering Science and Ocean Engineering (Area of concentration: EECS) • GPA: 4.06/4.3 (Overall) - Top 5% in the class. • 4 Presidential Awards (Fall 2018, Spring 2019, Fall 2019, and Spring 2020) • Related courses: Introduction to Computer and Programming, Data Structures, Object-Oriented Programming, Discrete Mathematics, Probability and Statistics, Numerical Methods, Machine Learning, Automatic Control, Parallel Computing, Database Systems, Web Programming, Design and Application of Virtual Instruments 	
EXPERIENCE	<ul style="list-style-type: none"> • Trend Micro Inc. Taipei, Taiwan Cloud Development Engineer Sep. 2021- Present Software Engineer Intern July 2021- Aug. 2021 Developing and testing cloud-based device vulnerability scanning service. <ul style="list-style-type: none"> ◦ Implemented 80% test cases of all features in two weeks, successfully identified two bugs before major release. ◦ Designed and deployed CI/CD and test pipeline through Jenkins to reduce 50% of efforts on building verification. ◦ Used Terraform to modify cloud infrastructure and configurations. ◦ Promoted to contract-based software engineer after internship for outstanding performance. • MineNTU Team - National Taiwan University in Minecraft Remote Co-Founder, Software Engineer May 2021 - Present Building a virtual campus in Minecraft to facilitate students' social life despite distance learning. <ul style="list-style-type: none"> ◦ Adopted scrum-based methodology and shortened development cycle to release new buildings biweekly. ◦ Released a verification platform paired with a Discord bot in a week to process a maximum of 800 registrations per day. ◦ Organized a 1000-player-grade Minecraft graduation ceremony based on Azure cloud platform in two weeks. ◦ Preparing the donation of the Minecraft school map to the Gallery of NTU History. • FIRST Tech Challenge (FTC) Championship St. Louis, USA Mechanical and Java Software Engineer Jan. 2016 - Oct. 2016 Participated as a member of the Taiwan national team to compete with 128 international groups. <ul style="list-style-type: none"> ◦ Designed and built robots with TETRIX components to solve simulated rescue tasks. ◦ Modified the Java program to control robots via Android devices. ◦ Organized engineering reports and presentations to convey design ideas. 	
RESEARCH	<ul style="list-style-type: none"> • Nano-BioMEMS Group, National Taiwan University Sep. 2020 - Jan. 2021 Advisor: Prof. Wen-Jong Wu Topic: Development and Simulation of Piezoelectric Micro Pump for cooling applications. <ul style="list-style-type: none"> ◦ Investigated properties and applications of piezoelectric materials. ◦ Designed piezoelectric micropumps to provide chip cooling solutions for small chassis. ◦ Simulated piezoelectric actuator and micropump chamber performance in COMSOL. 	

PROJECTS

- NTUCourse Neo (Web Programming course project)** Nov. 2021 - Present
 A redesigned course planning web service for students in National Taiwan University.
 - Assisted 2000+ students in course planning and gained 400+ registered users in a month.
 - Designed frontend interface using React to provide intuitive user experience.
 - Defined RESTful API specification and implemented JWT with Auth0 service.
 - Currently implementing a data proxy based on Azure Function App to parse live course waitlist data from the NTU course selection system.
- Java (Object Oriented Programming course project)** Feb. 2020 - June 2020
 - Designed database and UI of two Java-based application for tour booking and course planning.
 - Developed a custom layered data structure to achieve 50% faster query speed than other teams.
 - Implemented a customized, user-friendly intuitive interface by creating custom classes.
 - Won 2nd place in the class competition.
- A .io Game** June 2020 - Dec. 2020
 Developed an online multiplayer mini game based on open-source projects.
- Memez - a Discord bot** Jan. 2021 - June 2021
 - Developed a personal Discord bot using Python to assist daily tasks.
 - Designed functions to fetch and parse *Formula 1* game schedules from public APIs.

VOLUNTEERING AND ACTIVITIES

- GreenFeather Volunteer Group** Kaohsiung, Taiwan
Former leader Jan. 2018 - Present
 - Led a team of 40 volunteers in organizing courses and activities for students in remote areas.
 - Used the *Coding Ocean* table game to create the *Logic&Code 101* course for primary students.
- NTU Photography Club (NTUPHOTO)** Taipei, Taiwan
President Jan. 2020 - July 2020
 - Trained 50 staff to organize online lectures; kept providing club activities despite restrictions to public venues due to Covid-19.
 - Launched new courses and internships for 100+ club members to enhance the quality of lectures during the pandemic.
- Kaohsiung Group Association of NTU** Taipei, Taiwan
Vice President Aug. 2019 - July 2020
 - Organized a three-day freshman camp for 50 freshmen from Kaohsiung, Taiwan.
 - Developed a number-guessing app for the *Escape the Room* game by C++.

LANGUAGES AND SKILLS

- Languages: Taiwanese Mandarin (*native*), English (*proficient*), Japanese (*intermediate*).
- Skills: C/C++, Python, Java, JavaScript (React), Docker, Azure cloud service, Groovy (Jenkins), LabView, MATLAB, COMSOL Multiphysics.