# Tsung-Yu Chan

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## Education

**National Yang Ming Chiao Tung University**                    *Hsinchu, Taiwan*
Master of Computer Science and Engineering                    Feb. 2022 – Feb. 2024
– GPA: 4.3/4.3
– Thesis: 5G NR PUSCH Procedure Optimization and Parallelization Based on ARM Platform
**National Taiwan University of Science and Technology**                    *Hsinchu, Taiwan*
Bachelor of Electronic and Computer Engineering                    Sep. 2018 – Jan. 2022
– GPA: 4.0/4.3

## Experience

**Synopsys**                    *Taipei, Taiwan*
Sr. R&D Engineer                    Feb. 2025 – Present
– Designed and implemented graphical user interfaces (GUI) using Qt framework.
**EURECOM**                    *Biot, France*
Intern                    Apr. 2023 – Sep. 2023
– Migrated OpenAirInterface to the AArch64 platform.
– Developed OpenAirInterface on the AArch64 platform.
– Optimized and parallelized the physical layer of OpenAirInterface.
**eCloudvalley Digital Technology**                    *New Taipei, Taiwan*
Intern                    Apr. 2021 – Aug. 2022
– Developed technical materials for learning AWS and Azure.
– Developed the cloud services playground platform using AWS and Azure.
– Developed an IoT-enabled pool table project.

## Skill

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|---|---|
| **Domain Knowledge** | 5G, Web, DevOps, Software Engineering, Unix-like Operating System |
| **Programming** | C, C++, Python |
| **Other** | Docker, Kubernetes, AWS, Azure |

## Project

**Simple OS Kernel on Raspberry Pi 3**                    *Course Project*
– Developed a simple OS in a bare-metal environment.
– Implemented exception and interrupt handling, along with basic system calls.
– Supported virtual memory management using a buddy system for page allocation.
– Added multitasking support with a scheduler and context switching.
**Video streaming platform**                    *Team Project*
– WebRTC-based live streaming platform.
– Supported the chat room on the platform.
– Supported the login feature for managing the users.