

Yun-Hsuan Chan

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EDUCATION

Oregon State University

Master of Engineering in Computer Science

Corvallis, OR

Sep. 2023 – Jun. 2025

- Relevant Coursework: Principle of Computer System Design, Computer Architecture, Mobile Software Development, Algorithms and Design, Cloud Application Development, Database Systems, Machine/Deep Learning

Tamkang University

B.S. in Computer Science and Information Engineering

New Taipei City, Taiwan

Sep. 2016 – Jun. 2020

- Relevant Coursework: Operating Systems, Algorithms and Data Structures, Network Programming, Mobile Device Programming, Database Design

WORK EXPERIENCE

Capital Securities Corporation

Software Engineer

Taipei, Taiwan

Feb. 2020 – May. 2022

- Created a high-performance stock trading application using **C++ Builder**, improving product search and order placement times by 20% through optimized algorithms.
- Crafted intuitive **UI/UX**, reducing user errors by 15% and boosting client satisfaction by 20%.
- Architected and implemented a real-time data integration system, interact **RESTful APIs** to provide instant stock updates and comprehensive historical data analysis.
- Led version control strategy using **Git** and **SourceTree**, ensuring seamless collaboration and code management.
- Built automated trading strategies that allows customers to fully automate order placement.

PROJECTS

Course Management API Development

[MySQL, Docker, Node.js/Express, Google Cloud]

Apr. 2024 – Jun. 2024

- Developed scalable **RESTful API** using **Node.js/Express** for course management and role-based access control.
- Designed and optimized **MySQL** database schema, ensuring data integrity and supporting course-related queries.
- Deployed the API on **Google Cloud** Platform, providing a public URL for widespread accessibility.
- Produced **JWT** authentication, encryption, and rate-limiting to secure data and prevent unauthorized access.
- Utilized **Docker** to containerize the API, ensuring consistency across development and production environments.

Planen: Plan Manager

[Kotlin, Android Jetpack, Retrofit, Moshi]

Jan. 2024 – Mar. 2024

- Developed a plan management app, integrating to-do lists, deadline tracking, and calendar functionalities.
- Designed dynamic deadline progress visualization and enabled holiday synchronization using **Nager.Date API**.
- Utilized **Android Jetpack**, applying RecyclerView, Activity Lifecycle, ViewModel architecture and Fragments.
- Integrated **Retrofit** with **Moshi** to facilitate efficient network communication and streamline JSON parsing.
- Enabled local data persistence with **Room Library** and enhanced personalization via **Preference Library**.
- Implemented push notifications and enabled social sharing for users to share schedules.

Employee Database Management System

[C++, Data Structures, External Storage, Sorting, Indexing]

Jan. 2024 – Mar. 2024

- Developed a comprehensive database management system in **C++**, focusing on optimizing external storage, indexing, sorting, and join operations to enhance data retrieval efficiency.
- Built a storage management solution handling fixed-size and variable-size fields in 4KB pages.
- Created a hash index for fast record retrieval by ID, improving query performance and efficiency.
- Engineered a two-pass multi-way sorting algorithm and optimized sort-merge joins for efficient data processing.

TECHNICAL SKILLS

Programming Languages: C++, Python, Kotlin, SQL, HTML/CSS

Frameworks / Libraries: PyTorch, Node.js, Express.js, Android Jetpack, Retrofit, Moshi

Tools : Git, Docker, SourceTree, MySQL, MongoDB, Postman, Google Cloud