Po-Yu **Chen**

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Summary

A highly motivated graduate with a deep passion for programming and learning new technologies. Actively seeking a software engineering role to apply extensive computer science knowledge and problem-solving skills, to deliver valuable contributions.

Education

National Taiwan University — *Taipei, Taiwan*
M.S. in Electrical Engineering — *Sep. 2022 - Jun. 2024 (Expected)*
- GPA: 4.20/4.30
- Research Interests: High Performance Computing, Parallel Graph Algorithms on GPUs

National Taiwan University — *Taipei, Taiwan*
B.B.A. in Information Management & International Business | Double Major — *Sep. 2017 - Jun. 2022*
- GPA: 3.82/4.30
- Relevant Coursework: Data Structures & Algorithms, Operating Systems, Computer Networks, Cloud Native Application Development, Machine Learning, Cyber Security, Computer Vision

Work Experience

MediaTek — *Hsinchu, Taiwan*
Software Engineer Intern, Tech Stack: C++, Bazel, Protobuf — *Jul. 2023 - Aug. 2023*
- Enhanced the 5G modem profiler by introducing new visualization features, benefiting over 100 colleagues
- Developed a parser that serializes data into Google's Protocol Buffers format, seamlessly integrating with Google's Perfetto Trace Viewer UI, thereby enabling more effective analysis and debugging of performance issues

A&R Research Capital (Crypto Quantitative Fund) — *Taipei, Taiwan*
Founding Member, Software Engineer & Quantitative Trader, Tech Stack: C++, Cmake, GoogleTest, Docker — *Jan. 2022 - Sep. 2022*
- Led a 5-person infrastructure team to develop tools for crypto trading, utilizing a Test-Driven Development (TDD) approach
- Engineered a high-frequency trading strategy in C++, with robust error and signal handling mechanisms, yielding consistent profits
- Automated the build and testing processes by scripting, achieving a more efficient and streamlined development workflow
- Elevated test coverage from 40% to 90% by writing unit tests utilizing GoogleTest
- Refactored tightly-coupled codes and eliminated duplications to enhance the reusability and maintainability

Projects

Trademark Retrieval Mobile App - Google Play/App Store — *Taipei, Taiwan*
Tech Stack: Pytorch, PostgreSQL — *Feb. 2021 - Jan. 2022*
- Crawled the labels for trademark image and maintained a postgreSQl database to store the data
- Fine-tuned a ResNet-based model on the trademark data to learn image representations through a multi-label classification task, enabling downstream image retrieval task

Secure P2P Micro-payment System — *Taipei, Taiwan*
Tech Stack: C++, Linux TCP Socket, Multithreads Programming — *Nov. 2021 - Jan. 2022*
- Built client and server that communicated through secure TCP/SSL socket in a producer-consumer scheme using C++ std thread api

Product Recommendation System for Fubon Financial Holding Co., Ltd. — *Taipei, Taiwan*
Tech Stack: Python, Scikit-learn, Machine Learning — *Feb. 2021 - Jun. 2021*
- Used ensemble and over-and-under-sampling techniques to build a classification model with high AUC score that equally matched with the real inner system adopted by Fubon

Skills

Programming	C/C++, Python, Cuda, Bash, Node.js
Tools	Git, Unix/Linux, Docker, Gdb, CMake, Bazel
CS Domain	OS, Computer Architecture/Network, ML/DL, Parallel Programming
Misc	PyTorch, LaTeX, SQL, Express, React
Language	Mandarin (Native), English (Fluent)