Tungyu Chou

Ann Arbor, MI | (734) 492-2310 | ctungyu11@gmail.com | [Linkedin](#)

Seeking a software engineer internship position in Summer 2025 (May 2 – Aug 31)

Work Experience

Backend Developer Intern

DA Capital, Taiwan and Remote | *Apr 2024-Present*

- **Led the development and deployment** of a **Python-based SaaS trading bot** on **Kubernetes**, supporting thousands of customers and driving **10-20% annual profit** with minimal risk.
- **Optimized the accuracy and efficiency of trading strategies** to execute the **thousands of trades in a high frequency**, conducting **backtesting** and **real-time analytics** to refine performance and manage risk.
- **Designed and implemented RESTful APIs** with **Golang (Gin framework)** and **PostgreSQL**, enabling clients to track bot performance, receive real-time data, and customize trading strategies.
- Developed a **Telegram bot in Python** to monitor **blockchain transactions**, providing real-time updates to traders, improving decision-making speed and accuracy.
- Represented DA Capital at the 2024 Asian Blockchain Summit, presenting cutting-edge trading technologies and facilitating strategic partnerships.

Software Engineer Intern

Industrial Technology Research Institute, Taiwan | *Jun 2022-Aug 2022*

- Collected and labeled **12,000+ images** for training deep learning models used in **lane detection** for **autonomous vehicles**, ensuring high-quality data for model training.
- Developed **three Python-based automation tools** to streamline image annotation workflows, **improving efficiency and accuracy by 50%** through image filtering and automated false annotation correction.

Projects

Crypto Order Management System and Backtesting System

- Developed a **crypto order management system** with a team of 5, enabling execution of quantitative trading strategies across spot, futures, and options markets.
- Collaborating with professional traders to automate strategy execution, **integrating real-time trading signals** using **Go** and **computer networks**.

Search Engine and Recommender System

- Built a **Search Engine** using **TF-IDF** and **PageRank** for ranking and retrieving relevant web pages.
- Created a two **RESTful API server** using **Python Flask** to serve queries and render dynamic web pages.

Skills

- **Backend Programming:** Python, Go (Golang), C++, SQL
- **Databases:** PostgreSQL, MySQL, SQLite, Vault
- **API Development:** RESTful APIs (Flask for Python, Gin for Go)
- **Data Analysis & Scientific Computing:** Pandas, Numpy, SciPy, scikit-learn, Spark
- **Cloud & Deployment**: Google Cloud Platform (GCP), AWS, Docker, Helm Charts
- **Tools & Platforms**: Git/GitHub, Jira, Kubernetes, CI/CD pipelines
- **Problem Solving:** 700+ Leetcode problems solved (Data Structures & Algorithms)
- **Languages:** Mandarin (native), English (fluent)

Education

Bachelor of Science in Computer Science and Mathematics

University of Michigan, Ann Arbor | **GPA** 3.97 /4.0 | *August 2022-May 2026 (expected)*

- **Honors:** William J. Branstrom Freshman Prize, University Honors, James B. Angell Scholar award
- **Courses:** Web Systems, Data Structures & Algorithms, Natural Language Processing, Data Mining, Computer Vision, Continuous Optimization, Probability & Statistics, Linear Algebra