

Derrick (Chun-Che) Lin

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EDUCATION

University of Illinois Urbana-Champaign

Master of Computer Science

Illinois, USA

Jan. 2024 – present

National Taiwan University

B.S.E. in Electrical Engineering

Minor in Economics

Taipei, Taiwan

Sep. 2019 – Jun. 2023

EXPERIENCE

American Express

Software Engineer

Phoenix, AZ

Jan. 2024 - present

- Improved **caching resilience** for digital banking services.
- Designed and implemented high-performance API and system of record functions using **Java Vert.X**, processing **2k debit transactions per hour**.

LINE

Software Engineer Intern

Taipei, Taiwan

Sep. 2022 - Jun. 2023

- Architected and implemented a scalable **microservices** architecture for serving **150 million users** globally.
- Created **CI pipelines** building **Docker images** and measuring code quality with **SonarQube**, automated deployment to **Kubernetes** clusters with **ArgoCD**, and monitored with **Grafana** and **Prometheus**.
- Developed **REST** and **gRPC** APIs in **Go** with **90% test coverage**, and enhanced code modularity and reusability with **dependency injection** and the service / repository pattern.
- Designed and implemented a high-performance data retrieval and storage system, utilizing cronjobs for automation and **multithreading** for efficient transfer of **27M records** from **Amazon S3** to **Redis** in **under 10 minutes**.

Yahoo

Production (DevOps) Engineer Intern

Taipei, Taiwan

Jul. 2022 - Aug. 2022

- Trained an **ML** model to predict if an incident needs manual review or intervention.
- Created a **CI pipeline** to periodically fetch incident data from ServiceNow, classify incidents using the trained ML model, and update to Google Sheets, **reducing manual monitoring time by 30 minutes per day**.

RushPay

Software Engineer Intern

New Taipei, Taiwan

Jul. 2021 - Dec. 2021

- Built a unified platform integrating multiple ordering methods, payment systems, and delivery services, serving over **200 restaurant owners and 10k customers**.
- Developed full-stack features using **jQuery** and **Laravel**, with **MySQL** and **MongoDB** for storage.

PUBLICATIONS

- C. -C. Lin**, Y. Chiang, and H. -Y. Wei, "Multi-Service Edge Computing Management with Multi-Stage Coalition Game Task Offloading," IEEE TNSM, 2024
- C. -C. Lin**, Y. Chiang, and H. -Y. Wei, "Collaborative Edge Caching with Multiple Virtual Reality Service Providers Using Coalition Games," 2023 IEEE WCNC, Glasgow, United Kingdom

PROJECTS

Live Classroom Monitoring with Embedded System and Cloud

<https://github.com/dlccyes/LF2>

Flask, Vue, Jetson Nano, AWS, ML

- Developed a real-time face and emotion recognition system using **AWS Rekognition** on **Jetson Nano**.
- Built a web dashboard to visualize data using **Vue** and **Flask**, with **DynamoDB** as the data store.
- Created a **CI/CD pipeline** with **Github Action** to build and deploy the application to **AWS EC2**.

Full Stack Spotify Stats Site

<https://playlastify.web.app/>

Django, jQuery, GCP

- Built a web app interacting with Spotify API to visualize users' Spotify stats, serving **300 monthly users**.