

Hsuan-Ling Lin

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EDUCATION

Rice University

M.S. in Computer Science

Houston, TX

Aug. 2021 - Expected Dec. 2022

National Tsing Hua University

M.S. in Communications Engineering

Hsinchu, Taiwan

Sept. 2014 - July 2016

- Overall GPA: 3.96/4.3

WORK EXPERIENCE

JKOPay Co. Ltd. (The most used mobile-payment system in Taiwan)

Taipei, Taiwan

Backend Developer - Business Solution Team

July 2020 - June 2021

- Built e-ticketing server-side service and architecture from scratch using **Java Spring Boot, MyBatis, MySQL, Docker-Swarm, and ELK stack for log management**; features include launch events, sell tickets, transfer tickets, and verify entrance tickets.
- Raised 17% coupon allowance rate and gained \$3000+ revenue each month in coupon service by implementing new type instant-payback coupon through **Python Django framework, Redis Queue and MySQL**.
- Involved in developing a **Python-based** coupon service capable of handling 2500+ RPS while users collected coupons by designing cache via **Redis**, exploiting **Redis Queue** to send coupons to users, and synchronizing data by **Kafka**.
- Independently developed a **content management system** to set up coupons, campaigns, and missions for internal marketing specialists.
- Developed **RESTful APIs** and designed relational database schema that integrate web clients with server backends.
- Wrote unit test with high coverage to assure better software quality.
- Maintained **Django-based** financial settlement system and e-donation service.
- Participated in design and code reviews, fix bugs, and resolve production issues.

MediaTek Inc. (A global leading fabless IC design company.)

Taipei, Taiwan

Software Engineer

Dec. 2016 - Jan. 2019

- **Won 2 times MStar Short Term Reward**, which is a recognition of top 3 outstanding employees in the Research and Development Division each quarter.
- Improved video compression rate of motion vector in Google AV1 c-model by 65% through researching and developing data compression algorithm.
- Developed software test functions in Video encoder (JPEG/H.264/HEVC), decoder (Google AV1) C-model by **C/C++** for verifying FPGA hardware IP functions, covered all target test items.
- Developed desktop application as GUI tool to decode multi-format coding image and display a variety of YUV formats, designed user-friendly interface by **C++ Windows Forms**.
- Analyzed issues, designed auto-test by scripting language, and worked with hardware designer to resolve problems.

PROFESSIONAL SKILLS

Programming

Python, Java, C, C++, MySQL

Web Development

Django, Spring Boot, RESTful API, Redis, Docker, Kafka, ELK Stack, Jenkins

Software Engineering

OOP/D, Microservices, JUnit testing, IntelliJ, PyCharm, Linux, Vim, Git

RELEVANT COURSEWORK

National Taiwan Normal University: Computer Algorithms (A+) · Operating Systems (A+)

National Central University: Computer Networks (A+) · Data Structure (A)

Udemy: Spring Framework Master Class · Python Django Dev To Deployment · MySQL for Data Analytics and Business Intelligence · Master Microservices with Spring Boot and Spring Cloud