Hsuan-Ling Lin

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EDUCATION

Rice University Houston, TX

Master of Computer Science Expected Dec. 2022

National Tsing Hua University

Hsinchu, Taiwan Master of Science in Communications Engineering · GPA: 3.96/4.3 Sept. 2013 - July 2016

National Central University

Taoyuan, Taiwan Sept. 2009 - June. 2013 Bachelor of Science in Communications Engineering

WORK EXPERIENCE

JKOPay Co. Ltd. (The most widely used mobile payment system in Taiwan.) Backend Developer - Business Solution Team

Taipei, Taiwan July 2020 - June 2021

• Built e-ticketing server-side service from scratch using Java Spring Boot, MyBatis, MySQL, Docker, 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 instant-payback coupon by 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, leveraging Redis Queue to send coupons to users, and synchronizing data by Kafka.
- Independently developed a content management system by Python Django to set up coupons, campaigns, and missions for internal marketing specialists.
- Developed **RESTful APIs** and designed relational database schema that integrates web clients with server backends.
- Improved **Django-based** financial settlement system and e-donation service by refactoring code.
- Assured high software quality by writing unit tests with high coverage.
- 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 Dec. 2018
- 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 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 images and display a variety of YUV formats, designed user-friendly interface by C++ Windows Forms.
- Analyzed issues, designed auto-test by scripting, and collaborated with hardware designer to resolve problems.

PROFESSIONAL SKILLS & INTERESTS

Programming Python, Java, C, C++, SQL

Web Development Django, Spring Boot, RESTful API, Redis, Docker

Software Engineering OOP/D, JUnit testing, IntelliJ, PyCharm, Linux, Vim, Git

Interests basketball, movies, travelling, shopping

RELEVANT COURSEWORK

Web Development and Design, Database Systems, Computer Algorithms, Operating Systems, Computer Architecture, Computer Networks, Data Structure

Udemy: Spring Framework Master Class, Python Django Dev To Deployment