CHIA-JUNG CHANG

📞 +1 619-953-7674 ✉️ rabbit20058@gmail.com in linkedin.com/in/chiajungchang-ron ○ changchiajung.github.io

Education

University of California San Diego — September 2022 – December 2023
Master of Science in Computer Science — CA, United States
- Avg. GPA: 3.77/4.0

National Cheng Kung University — September 2017 – January 2021
Bachelor of Science in Electrical Engineering — Tainan, Taiwan
- Avg. GPA: 3.99/4.30
- Capstone project: A restful framework for online rental systems.
- Independent study: Empirical study of system reliability, advised by Prof. Hewijin Christine Jiau.

Technical Skills

Development Experience: Backend, Database, Android, Automation testing, Data analysis, CI/CD

Programming Languages: Python, Java, C, JavaScript, SQL, Go, Bash script

Technologies/Frameworks: Linux, Git, Docker, Django, Tensorflow, AWS, Object Oriented Programming

Professional Experience

Research Assistant — January 2022 – August 2022
Academia Sinica — Taiwan
- Developed an online experiment platform through Otree and django framework.
- Deployed and applied automation testing through CI on heroku platform.

Software Engineer Intern — January 2022 – June 2022
Kdan Mobile — Tainan, Taiwan
- Developed android application and automated integration testing. Improved the code coverage by 15%.
- Constructed development infrastructure for DevOps team, applied product evaluation tools, and designed CI/CD pipeline for android product.
- Integrated program analysis automation tool into development process.
- Utilized Amazon Web Services to deploy multiple development automation tools on cloud services.
- Reduced android application deployment period by 40%.

Research Assistant — August 2018 – February 2021
Database and Software Engineering Lab, NCKU — Tainan, Taiwan
- Developed an API usage analyzer. Automatically analyzed API usage in open source projects efficiently and precisely, provided reliable information for multiple research projects.
- Conducted an independent study for empirical research of reliable systems in the healthcare domain.
- Designed and analyzed a software system to correspond the epidemic.

Selected Projects

API Usage Analyzer | *Java, MySQL* — February 2021
- Applied Javaparser to analyze the API usage of 1000+ open source repositories and classified them into 20 categories.
- Designed an extendable database schema to improve data processing performance and feasibility with relational database, which handled over 10 millions+ records.
- Used a Metabase framework to build user interface allowing the user to query and analyze with visualization chart.
- Developed with Agile method to cope with the complex and uncertain user requirements.

Pavement Problem Handler | *Python, MySQL, Google Cloud platform, Tensorflow* — June 2020
- Cooperated with Tainan City Government to develop a tool to decrease the workload of pavement problem handling.
- Implemented a mobile user interface to increase the user experience with Vue.js and Django framework.
- Build a ConvLSTM network model to predict high-risk pavement problems.