

QI-XUAN LU

(412) 954-8468 | h164654156465@outlook.com | linkedin.com/in/lu-qixuan | github.com/h164654156465

SUMMARY & SKILLS

Software engineer specialized in full-stack and backend development. Seeking a software engineer position starting in 2023

Development: Java, Spring Boot, Node.js, Express, JavaScript, TypeScript, SQL, Python, Flask, Django, HTML, CSS, React, Go

Other Tools: Git, JUnit, Maven, Gradle, Webpack, Shell, Linux, Docker, Kubernetes, PostgreSQL, MySQL, MongoDB, Azure

EDUCATION

Carnegie Mellon University

Aug. 2021 – Dec. 2022

Master of Information Systems Management in Software Development

Pittsburgh, PA

Coursework: Computer Systems, Distributed Systems, Web Development and Applications, **API Design and Implementation**

National Central University

Sept. 2016 – June 2020

Bachelor of Information Management

Taoyuan, Taiwan

Coursework: Object Oriented Programming in Java, Data Structure, Algorithm, Database Management, Cloud Computing, Web

Programming, Computer Networks, System Design and Analysis, Big Data and Applications, Information Systems Development

WORK EXPERIENCE

Oracle Corporation

May. 2022 – Aug. 2022

Software Engineer Intern

Remote

- Enhanced **observability** and **logging** for my team by integrating Spring Boot service with **Elasticsearch** and **Kibana**
- Empowered other teams to alleviate their workloads by building and augmenting **query** features for **Spring Boot** service
- Deployed and tested my codes on production environment with **Gradle**, **GitLab CI**, **JUnit**, **Mockito**, Kubernetes, and Helm
- Wrote maintainable and modular codes using **Spring MVC**, generics, dependency injection, builder, and **proxy patterns**

iKala (Leading Startup in Asia)

Sept. 2020 – Feb. 2021

Software Engineer Intern

Taipei, Taiwan

- Reduced development time for web crawlers **from 3 days/week to minutes** through building an **API generator in JavaScript**
- Optimized APIs by **10X faster** via determining and visualizing the most efficient web request **dependency graph (DAG)** and parameters

Microsoft

July 2019 – June 2020

Cloud Solution Architect Intern

Taipei, Taiwan

- Fine-tuned performance and **scaled out 100+ nodes** using **Kubernetes**, **PySpark**, and cached data in **SQL Servers** and **HDFS**
- Processed **real-time** data from air quality sensors around Taipei to **Azure SQL Database** and predicted its pollution locations
- Improved data processing speed by **10X** by leveraging PySpark on **Azure Databricks** with 20+ VMs and 200+ cores
- Demonstrated Azure Speech Service (text to speech, speech to text,...) by building a website with **Expressjs** and **Bootstrap**

Industrial Technology Research Institute (Top Research Institute in Taiwan)

June 2018 – Dec. 2018

Software Engineer Intern

Taoyuan, Taiwan

- Queried and visualized search keywords via creating a **Django** website with data validation, and dashboard features
- Managed login by authorizing users with **access token**, cache, and session, saving search results in **MySQL** for faster loading

PROJECTS

Coursework in Intro to Computer Systems (18613)

Jan. 2022 – May 2022

- Built a **multi-threaded proxy server in C** that will forward requests from client to server and cached pages for faster retrieval
- Implemented a C library (**dynamic memory allocator**) that optimizes and balances memory throughput with utilization

Mobile Users Behavior Tracking

Feb. 2022 – Mar. 2022

- Tracked mobile users' behaviors by recording and sending the activity logs from Android clients to backend for visualization
- Built and deployed **Java Web Service** (APIs) to Heroku with **Docker** and managed users and behaviors data in **MongoDB**

Thinkord (Multimedia Notes Taking App) | <https://github.com/thinkord/thinkord>

Feb. 2019 – Sept. 2021

- Crafted an open-source **Electron** application with 5 developers to help users take multimedia notes **500%** faster and more easily
- Implemented multimedia features(audio, video, etc.) with **TypeScript** and **managed state with React Context and Hook**
- Orchestrated messages for application windows to communicate with each other using Inter Process Communication

Chatbot Message to Order Service

Sept. 2018 – Apr. 2019

- Transformed text messages generated in a **500-people** LINE chatroom with Python to product orders through string matching
- Monitored and delivered text messages via LINE webhhok to **Flask** app on Apache HTTP Server for conversion to orders

Wildfire Elimination System for NASA Space App Challenge

Nov. 2019 – Nov. 2019

- Collaborated with 5 developers to build a **cloud** system to fight California wildfire in a 2-days NASA Space App Challenge
- Managed **microservices** on Azure Function and Azure App Service, storing data on Azure Blob Storage and Azure Cosmos DB