

Geli Yang

Seeking Software Engineer roles. Open to relocation. Available in June.

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EDUCATION

Villanova University

Master of Science in Computer Science GPA:3.6/4.0

Villanova, PA

Aug. 2021 – May 2023

University of Pennsylvania

Master of Science in Mechanical Engineering, concentration in Robotics GPA:3.5/4.0

Philadelphia, PA

Aug. 2019 – May 2021

University of Arizona

Bachelor of Science in Mechanical Engineering, minor in Mathematics GPA:3.5/4.0

Tucson, AZ

Aug. 2015 – May 2019

WORK EXPERIENCE

Software Development Engineer Intern

Uber (Hong Kong), Limited

June. 2022 – Aug.2022

Hong Kong, Remote

- Worked in the management and support team to develop a ride distribution system facilitating **MQTT** protocol.
- Delivered over **90 RESTful endpoints** via **Spring Boot** to handle **HTTP** requests including user registration, order placing, and ride tracking. Achieved **88%** code coverage using **JUnit** test framework.
- Utilized **Mybatis** framework to implement data access interfaces and customized **over 40** dynamic SQL queries for data retrieval. Reduced query time **by 50 %** using **indexing**.
- Introduced **Redis** to reduce the time of fetching data. Improved GET endpoints efficiency **by 70%**.
- Integrated an **EMQ X MQTT** broker and adapted publish/subscribe model to distribute MQTT 5.0 messages.
- Built the frontend with **VueJS** and integrated **BaiduMap SDK** to allow users to select locations on a map.

Teaching Assistant - Design of Mechatronic Systems

University of Pennsylvania

Jan 2021 – May 2021

Philadelphia, PA

- Held over **100** hours of office hours to provide assistance to students' learning, instructed students in weekly labs.
- Coached 6 students and assisted them in debugging **C** codes of the autonomous robot car.
- Collaborated with a team of 8 colleagues at the weekly meeting. Received **The Most Helpful TA** award.

SELECT PROJECTS

Multi-threaded File Transfer Implementation in Python

Dec 2022 – Jan 2023

- Developed client and server program to handle concurrent file transfer requests using **socket programming**.
- Supported commands including LIST, HELP, DELETE, UPLOAD, and LOGOUT to facilitate CRUD operations.
- Achieved **reliable transfer over UDP** by using Go-back-N algorithm. Verified correctness in test.

Order Management System with RESTful Spring Boot Microservices

July 2022 – Nov 2022

- Built a set of **RESTful** microservices to handle **HTTP** requests such as placing orders, checking inventory, and getting product details. Persisted data into multiple **MySQL** databases using **Hibernate ORM** framework.
- Registered services using **Eureka** and utilized **Spring Cloud Gateway** for load balancing and service routing.
- Integrated email notification using **Kafka**. Containerized application using **Docker**. Deployed to **AWS EC2**.

Leftover Marketplace - Winner of WaffleHacks 2022

June 2022 – July 2022

- Designed and implemented a surplus food and used goods marketplace application during the hackathon.
- Provided over **30 RESTful APIs** for users to register, log in, make posts, and chat via **ExpressJS**.
- Persisted user data into **MongoDB** database using **Mongoose** framework. Verified functionality using Postman.
- Leveraged **bcrypt** and **JWT** to encrypt server-side authentication. Deployed the backend to **Heroku**.

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, Go, C, C++, Bash, SML

Frameworks: Spring Boot, Django, NodeJS, ReactJS, ExpressJS, SpringMVC, Hibernate, MyBatis, AngularJS, JUnit

Databases: MySQL, PostgreSQL, MongoDB, Elastic Search, Cassandra, SQLite

Tools and others: JSON, Azure, AWS, GCP, Docker, Git, Apache Tomcat, Jenkins, Maven, Kafka, Postman, RPC, Mosquitto, TDD, CI/CD