

Yuqi Guo

☎: +1 (315) 863 7375 ✉: yuqi.guo17@gmail.com 🌐: [GitHub](#) 📝: [Blog](#)

EDUCATION

Syracuse University (SU)

M.S: Computer Science (GPA: 3.7)

University of Liverpool (UoL)

B.S: Computer Science (GPA: 3.6 *First Class*)

Relevant Courses: Data Structure, Algorithm, Operating System, Database, Computer Network, Human-Centric Interaction, Software Engineering, Mobile Computing, Computer Graphics, Machine Learning

Syracuse, New York

08/2022-05/2024(Expected)

Liverpool, UK

09/2017-07/2022

TECHNICAL SKILLS

Languages: Java, Python, HTML5, Haskell, PHP, Kotlin, MySQL, SQLite, MongoDB, Node.js, C#, Git

Frameworks/Libraries: TensorFlow, JUnit, Spring Boot, React, Linux, Vue.js, Hadoop, Node.js

Platforms: Vercel, Heroku, Supabase, Firebase and AWS (ECS, EC2, S3, Cognito, etc.)

Tools: Postman, Docker & Kubernetes, GitHub, Swagger UI, JWT Authentication/Authorization

Proficiencies: Java Web, Android Programming, Agile Projects, OOP, Computer Network, Database, Data Mining, Machine Learning and Computer Vision (CV), QA Test, E2E Test

WORK EXPERIENCE

CuraStone Corp

Backend Developer Intern | *Spring Boot, MongoDB, AWS, E2E Test*

Bellevue, WA, United States

08/2023-12/2023

- Developed an app to convert PDFs into interactive flashcards using **Spring Boot** and **DynamoDB** on **AWS ECS**, effectively processing over 5,000 documents in two months. Secured APIs using **JWT/Cognito**.
- Integrated **Mockito** and **JUnit** for robust testing, ensuring seamless frontend integration and enhanced user experience. Employed **Swagger 2** for API documentation and testing.
- Implemented **Newman** E2E tests within GitHub Actions for automated service monitoring and rollback, achieving 99.9% service availability.

Weina Technology Company

Backend Developer Intern | *Python, Docker & Kubernetes*

Lanzhou, China

9/2021-02/2022

- Developed and maintained backend services using Python **Flask** framework, ensuring robust and scalable application performance.
- Led **Kubernetes** cluster deployment, managing containerized applications for improved scalability and reliability. Implemented load balancing and auto-scaling to ensure high system availability.
- Utilized **Redis** for efficient **master/slave** node status management in **Kubernetes**, enhancing data synchronization and system resilience.

Tree Technology Co., Ltd.

Software Development Engineer Intern | *MyBatis, Vue.js*

Suzhou City, China

06/2020-08/2020

- Developed an online image annotation platform, enhancing user interaction and data handling, resulting in a 25% increase in user efficiency.
- Led backend development for efficient data storage, creating modules to store annotation data in **JSON**, using Java for versatile format conversion, improving processing speed by 30%.
- Integrated **MyBatis** for efficient database interactions and employed **Vue.js** to craft intuitive web modules, streamlining user login, image upload/download, and data querying processes.

PROJECTS

Gift Galaxy Microservices | *Spring Boot, Postman, Docker, Kubernetes, Helm* 🔄

02/2023-05/2023

- Engineered a microservices-based platform for Gift Galaxy, utilizing **Docker** Desktop and **Helm** for container orchestration, and Scaffold for continuous development, ensuring scalable and efficient service deployment.
- Orchestrated database connectivity and management using Docker Compose for **MongoDB** and set up **NGINX** Ingress Controller in Kubernetes for optimal traffic management and service reliability.
- Implemented robust **CI/CD pipelines** in GitHub, integrating **Kubernetes** secrets and PVCs for secure and persistent data storage, and conducted thorough service testing to maintain high availability and performance.

On-campus Club and Organization Community | *Android Based on Java, XML, and Firebase* 🔄

03/2020-06/2020

- Oversaw a group of 7 people in developing OCOC (On-campus Club and Organization Community), an **Android**-based social application for universities, improving communication efficiency between student organizations and students.
- Directed the implementation of key features and the design of a user-friendly interface, featuring intuitive navigation, search bars, and custom views, all optimized with multithreading for smoother user interaction.
- Implemented the MVC architecture, integrating a **real-time database** for information storage, **authentication** for secure user login/signup, and efficient image storage solutions via **storage**. Additionally, resolved critical issues like permission management and image file handling.

Net Disk Storage for Large Files | *Python via UDP Socket* 🔄

09/2019-12/2019

- Developed a custom pipelined protocol over **UDP** socket to replace the conventional stop-and-wait method, enhancing transmission efficiency by 33% for both large file uploads and downloads.
- Incorporated **Cipher Block Chaining (CBC)** encryption within the transmission pipeline, ensuring data security and reliability.
- Adhered to **Consistency, Availability, and Partition-Tolerance (CAP)** principles during multi-threaded operations, facilitating efficient and simultaneous file uploads and retrievals in the net disk system.

○ For more projects, please visit my [portfolio website](#).