# Yuqi Guo

— EDUCATION -

**Syracuse University (SU)** 

Syracuse, New York

**M.S**: Computer Science (GPA: 3.6)

08/2022-05/2024

University of Liverpool (UoL Joint Program with Xi'an Jiaotong-Liverpool University)

Liverpool, UK

**B.S**: Information and Computing Science (*First Class with Honor*)

09/2017-07/2022

#### TECHNICAL SKILLS

Languages & Frameworks: Java, Python, PHP, SQL/NoSQL, Node.js, Spring Boot, Flask, Vue.js, JUnit, Hadoop, Next.js Tools & Platforms: AWS, Azure, Heroku, Firebase, Docker, Kubernetes, GitHub, Postman

Core Skills: Backend Development, System Design, CI/CD, QA, E2E Testing, Cloud Platform and Database Management

# WORK EXPERIENCE

### **CuraStone Corp**

Bellevue, WA, United States

Backend Developer Intern | Spring Boot, REST API, Docker, AWS, CI/CD and E2E Test

08/2023-12/2023

- Created a PDF-to-interactive learning materials converter with **Spring Boot** and **RESTful API**s, processing over 5,000 documents in two months; integrated secure **JWT** authentication via **AWS Cognito**.
- Deployed the application on **AWS ECS** via **Docker Containers**, leveraging **DynamoDB** for data management, enhancing scalability and deployment efficiency.
- Implemented **Newman** (via **Postman**) **E2E tests** within GitHub Actions for automated service monitoring and rollback, achieving 99.9% service availability. Conducted robust testing using **Mockito**, **JUnit**, and documented APIs with **Swagger 2**, ensuring high-quality code and fully documented APIs.

## Weina Technology Company

Lanzhou, China

Backend Developer | Spring Boot, Microservice, Redis, Docker & Kubernetes

02/2021-02/2022

- Developed and maintained backend services for an e-commerce platform using the Java **Spring Boot** framework, ensuring robust and scalable performance.
- Led **Kubernetes** cluster deployment with **Helm** and **Ingress Controller**, managing containerized applications for scalability, load balancing, and auto-scaling.
- Implemented **Redis** for efficient master/slave node status management and **Keycloak** (with JWT Token) for authentication, enhancing system resilience and security.

#### — Projects —

PolyglotBot (AI English Content Chatbot) | Microservices, Spring Boot, Flask and LLM 🗘

02/2024-4/2024

- Developed a scalable backend for personalized English articles using the **OpenAI API**, implementing secure multi-threaded subscription management with **Pessimistic Locking**. Demo
- Deployed on **AWS EC2** using **Kubernetes**, containerizing *Zookeeper*, *Kafka*, *MySQL*, *Keycloak* and *PostgreSQL* within a custom **VPC** with public/private subnet.
- Integrated **NGINX** for reverse proxy and utilized API **Gateway/Elastic Load Balancer** for effective load balancing during peak traffic.
- Implemented Circuit Breaker, Kafka for IPC (*Inter Process Communication*), Zipkin for disturbing tracing, and monitored with **Prometheus** and **Grafana**.

**TalkNest (Online Chat & Video App)** | React, Node.js, WebRTC, Socket.io, Firebase and Heroku O 01/2024-03/2024

- Developed a real-time chat/video app supporting 2000+ messages and 100+ users. <u>Demo</u>
- Integrated **Firebase** for real-time `*uid*` and `*socketId*` mapping for video calls using **WebRTC** and **Socket.io**.
- Achieved 99.9% deployment success on Heroku with **CI/CD Pipelines** and Cypress for **E2E testing**, automated via **GitHub Actions**.

**Gift Galaxy Microservices** | *Microservices*, *Spring Boot, Postman, Docker, Kubernetes and Helm* • 02/2023-05/2023

- Engineered a scalable microservices gift recommendation platform using **Spring Boot**, **Docker** and **Helm**.
- Managed **PostgreSQL** and **MySQL** databases with Docker Compose, demonstrating orchestration skills.
- Implemented secure storage solutions using **Kubernetes Secrets** and **PV/PVC**, and configured Kubernetes **Gateway** and **Load Balancer** for efficient service discovery and traffic management.
- o Explore more on my Portfolio. Crafted with Next.js, Version-Controlled via Git, and hosted seamlessly on Vercel. O