

Yuqi Guo

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EDUCATION

Syracuse University (SU)

M.S: Computer Science (GPA: 3.7)

Syracuse, New York

08/2022-05/2024(Expected)

University of Liverpool (UoL)

Liverpool, UK

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

09/2017-07/2022

Relevant Courses: Data Structures, Algorithms, Operating Systems, Databases, Computer Networking, Human-Computer Interaction, Software Engineering, Mobile Computing, Computer Graphics, Machine Learning

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, Next.js

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

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

Proficiencies: Java Web, Android Programming, System Design, Continuous Integration/Continuous Deployment (CI/CD), OOP, QA Test, E2E Test, Computer Network, Database, Data Mining, Machine Learning and Computer Vision (CV)

WORK EXPERIENCE

CuraStone Corp

Bellevue, WA, United States

Backend Developer Intern | *Spring Boot, REST API, Docker Container, DynamoDB, AWS, E2E Test,*

08/2023-12/2023

- Created a PDF-to-interactive learning materials conversion tool with **Spring Boot** using **RESTful APIs** that successfully processed 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 effective frontend integration.

Weina Technology Company

Lanzhou, China

Backend Developer Intern | *Python, Docker & Kubernetes*

9/2021-02/2022

- Developed and maintained backend services for an e-commerce platform using the Python Flask framework, ensuring robust and **scalable application performance**, aligned with the job's emphasis on backend development.
- Led **Kubernetes cluster deployment**, managing containerized applications for improved scalability and reliability. Implemented load balancing and auto-scaling to ensure Cloud-based application deployment's availability.
- Utilized **Redis** for efficient master/slave node status management in Kubernetes, enhancing **data synchronization** and **system resilience**, which aligns with the job's focus on database management.

PROJECTS

TalkNest (Online Chat & Video App) | *React, Node.js, WebRTC, Socket.io, Firebase and Heroku* 🌐

01/2024-03/2024

- Engineered a real-time chat and video application using **React** and **Node.js**, featuring robust **CRUD APIs** and facilitating over 2,000 message exchanges and video calls for 100+ users in the past 3 months, aligning with the job's focus on real-time communication technologies. [Demo](#)
- Integrated **Firebase** for real-time mapping of ``uid`` with ``socketId`` for video calls using **WebRTC** and **Socket.io**, and facilitated message storage, aligning with the job's emphasis on scalable, cloud-based solutions.
- Achieved a 99.9% deployment success rate on **Heroku** by integrating **CI/CD pipelines** and employing Cypress for **E2E testing** via **GitHub Actions**, demonstrating skills in continuous integration.

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

02/2024-4/2024

- Developed a scalable microservice backend embedded **OpenAI** and Rapid API to create personalized English articles and natural-sounding audio for non-native speakers. Deployed Docker containers on Heroku, efficiently managing over 300 user requests at peak times within the last 20 days using a **Load Balancer**. [Demo](#)
- Implemented JRebel for seamless **Hot Deployments**, enhancing rapid development cycles. Integrated Eureka as a **Discovery Service** and set up a secure **Gateway** on Google Cloud using Keycloak for handling authorization requests.
- Achieved low-latency synchronous communication by **Circuit Breaker** with **Resilience4j** and facilitated Message Queue through **Kafka**. Utilized **Zipkin** for **Distributed Tracing**, with metrics visualization in **Prometheus** and **Grafana**.

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

02/2023-05/2023

- Engineered a microservices-based platform for gift recommendation system, utilizing **Docker** and **Helm** for container orchestration, aligning with job requirements for scalable microservices architecture.
- Orchestrated database connectivity and management with **Docker Compose**, integrating **PostgreSQL** and **MySQL** to provide comprehensive solutions, showcasing advanced expertise in database orchestration.
- Implemented robust **CI/CD pipelines** in **GitHub**, integrating **Kubernetes** secrets and **PVCs** for secure and persistent data storage, and set up a **Gateway** with **Kubernetes** as a discovery service, matching the requirements for continuous development and secure deployment practices.

○ Explore more on my [Portfolio](#). Crafted with *Next.js* and *Supabase*, *Version-Controlled* via Git, and hosted seamlessly on *Vercel*. 🌐