Yuqi Guo

☎: + 1 (315) 863 7375   ✉: yuqi.guo17@gmail.com   ⬯: GitHub   ▣: Blog

EDUCATION

Syracuse University (SU)   Syracuse, New York
M.S: Computer Science (GPA: 3.7)   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 Structure, Algorithm, Operating System, Database, Computer Network, Human-Centric 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, 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   Bellevue, WA, United States
Backend Developer Intern | *Spring Boot*, *MongoDB, AWS, E2E Test*   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   Lanzhou, China
Backend Developer Intern | *Python, Docker & Kubernetes*   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.   Suzhou City, China
Software Development Engineer Intern | *MyBaits*, *Vue.js*   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 Skaffold 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.

o   For more projects, please visit my [portfolio website](). Built with React, powered by Supabase, and deployed on Vercel. ⬯