Yifan Jiang

GHC 23 | yifanjiang.me | yifan.jiang@duke.edu | (984) 327-9560 | LinkedIn | GitHub

Education

Duke University Aug 2022 – May 2024
M.Eng. in Computer Engineering | Concentration: Software Development *Durham, NC*

University of Liverpool Sep 2018 – Jul 2022
B.S. in Information and Computing Science | GPA: 3.81/4.00 | First Class Honour *Liverpool, UK*

Technical Skills

Languages: Java, JavaScript, C, C++, Python, HTML, CSS, TypeScript, SQL
Frameworks: Vue.js, AngularJS, React.js, Node.js, Django, Spring Boot, Maven, OpenGL, Unity, PyTorch
Developer Tools: Docker, Git, Linux, GDB, Valgrind, MySQL, PostgreSQL

Experience

Software Engineer Intern May 2023 – Aug 2023
Advanced Institute of Information Technology, Peking University *Hangzhou, China*

- Utilized **Vue.js** and **TypeScript** to develop the front-end UI for a power supply e-commerce website. Implemented various features, including search, query, smart recommendations, login/registration, and pagination.
- Practiced **Agile** methodologies to collaborate with the back-end team for interacting with **REST APIs** and with the product team for aligning project requirements from customers.
- Resulted in a launch with a user base exceeding **10,000** in a few months and an **80%** increase in web traffic by integrating the developed website into other projects.

Software Engineer Intern Jun 2021 – Sep 2021
Hikvision Digital Technology Co., Ltd. *Hangzhou, China*

- Implemented customer-driven website features using **AngularJS** and **Vue.js**, enhancing the Starbucks monitoring system and introducing a critical mask detection feature, significantly enhancing safety measures.
- Deployed the system across **500** stores successfully, serving approximately **10,000** daily visitors, and achieved an impressive adoption rate of **95%** for the mask detection functionality.
- Played a pivotal role in the development of engineering tools and the enhancement of infrastructure components.

Projects

RISC Game | *Java, JavaFX, TCP Socket, CI/CD, Mockito, Docker* Feb 2023 – Apr 2023

- Organized a team of 3 to develop a multi-player game which enabled users to attack territories and obtain resources, move and upgrade soldiers. Developed backend server with **Java** and frontend UI with **JavaFX** and **MVC**.
- Added concurrency to deal with multiple players and used **TCP sockets** for server-client communication.
- Attained **100%** unit test coverage leveraging **Mockito** and a **CI/CD** pipeline with thorough end-to-end tests.
- Applied **OOP** principles to design and draw UML diagrams and prototypes for effective system visualization.

Mini Amazon | *Python, Django, PostgreSQL, Protocol Buffers, Bootstrap* Apr 2023 – May 2023

- Utilized **Django** and **PostgreSQL** to build a scalable full-stack web application simulating Amazon.
- Applied **Protocol Buffers** to establish efficient and reliable communications across different warehouse simulators and delivery systems, leading to an **82%** increase in simulation efficiency.
- Employed **TCP sockets** to maintain app functionalities and performance under various simulation speeds.

HTTP Caching Proxy | *C++, Emacs, GDB, Valgrind, Docker, Git* Feb 2023 – Mar 2023

- Developed an HTTP caching proxy server in **C++** under **Emacs** command-line development environment, supporting GET, POST, and CONNECT requests with efficient GET response caching.
- Enhanced server responsiveness with multi-threading and locks, accommodating up to **100** concurrent requests.
- Established RAII for memory management and conducted debugging with **GDB** and **Valgrind**'s Memcheck to maintain system stability.

On Campus Social Network System | *Vue.js, Spring Boot, MySQL, Redis, PyTorch* Mar 2021 – Jun 2021

- Directed a team of 7 to develop a feature-rich social network platform employing **Vue.js** and **Spring Boot**.
- Established the platform leveraging **Spring Boot**, **Maven**, **Redis**, **MyBatis**, and **MySQL**, encompassing advanced functionalities such as search, filter, sort, real-time chat, post creation, and comment management.
- Implemented a recommendation algorithm using **PyTorch** for personalized content suggestions.
- Attracted **500+** users within two weeks post-relaunch, demonstrating rapid user adoption.