Jingyi Xie

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EDUCATION

Aug 2019 – May 2021
Duke University, Pratt School of Engineering,
Electrical & Computer Engineering, Master of Science.
Major GPA: 3.9/4.0. ECE Merit Scholarship

2015 – 2019
Southeast University,
Electronic and Information Engineering, Bachelor of Engineering.
Major GPA: 3.96/4.0 (Top 1). Magna Cum Laude & First-Prize Scholarship (Top 2%)

SKILLS

JavaScript, Java, Python, C/C++

CSS, HTML, Django, Node.js, React.js, SQL, Docker, JavaFX, CI/CD, Emacs

INTERNSHIP

May – Aug 2020
Software Engineer Intern, EZTRAIN.
- Developed a web application to organize, prioritize and track squadron training at Seymour Johnson AFB.
- Devised and implemented algorithms to parse uploaded spreadsheets and schedule training events.
- Designed an intuitive and interactive dashboard to show details of trainees, tasks and events.

Oct 2018
Research Intern, CHINESE ACADEMY OF SCIENCES.
- Built a Modbus-based smart home control system, using MFC and C++.

Jun – Aug 2018
Research & Development Intern, SIEMENS.
- Designed and built a lab inventory management system, using VBA.
- Streamlined procedures of register, lookup, check-out and check-in lab inventory.

SOFTWARE ENGINEERING PROJECTS

Jul - Aug 2020
Feedback Collection App (JavaScript, React, Redux, Express, Node, MongoDB), side project.
- Developed a full-stack application to send mass emails to a big list of users to collect feedback.
- Utilized Passport and Google OAuth for authentication, Redux Form for user inputs, and Stripe for billing.

Apr – May 2020
Mini UPS System (Python, Django, PostgreSQL, Docker, Protocol-Buffers), team work.
- Constructed a full-stack UPS website in Django framework, paired with world simulator and Amazon systems.
- Developed the back-end server with Python and PostgreSQL, and an intuitive UI with Bootstrap.
- Built APIs to facilitate communications between microservices using Google Protocol Buffers.

Mar 2020
HTTP Caching Proxy Server (C++, TCP Sockets, Concurrency), team work.
- Realized GET, POST, and CONNECT request handling, using daemon process and multi-threading.
- Improved performance with response caching based on the rules of expiration time and revalidation in RFC7234.

Feb – May 2020
Risk Network Game (Java, JavaFX, Concurrency, JSON, CI/CD), team work.
- Built a multi-player game, using Java for back-end, JavaFX and MVC pattern for UI, JSON for communication.
- Implemented move/attack/upgrade/alliance orders, and an online chatroom

Feb 2020
Mini Google Protocol Buffer (Java, JSON, Gradle), individual project.
- Realized pulling class names and fields from input JSON files, generating Java source code (serialization and deserialization methods included). Improved with cycle handling in object reference graph.

Jan 2020
Ride Sharing Web-app (Python, Django, PostgreSQL, Docker), team work.
- Implemented functionalities like creating accounts, login/logout, driver registration, ride selection, ride requesting, ride status viewing and ride searching. Users can request, drive for, and join rides.

Nov 2019
Mini Linux Command Shell (C++, Multi-process, OOD, Valgrind), individual project.
- Developed a command shell that can change directory, set and export environment variables, redirect and pipe.
- Refined with argument parsing of escape and quotation mark, and searching PATH variable for commands.