

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

Java, JavaScript, Python, HTML/CSS, C/C++
Django, Node.js, React.js, JavaFX, PostgreSQL, MongoDB, Docker, 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 back-end logic to parse trainee spreadsheets and schedule training events
 - Designed an intuitive and interactive dashboard to show metrics of trainees, tasks and events
 - Expected to launch this year to streamline work process of more than 30 supervisors and 500 trainees
- Oct 2018 **Research Intern, CHINESE ACADEMY OF SCIENCES.**
- Built a Modbus-based smart home control system, using MFC and C++
 - Accomplished the remote control and monitoring of LED lights, electric fans and servo drives
- Jun – Aug 2018 **Research & Development Intern, SIEMENS.**
- Designed and built a lab inventory management system from scratch, using VBA
 - Digitized procedures of register, lookup, check-out and check-in lab inventory

SOFTWARE PROJECTS

- Jul - Aug 2020 **Feedback Collection App (JavaScript, React, Redux, Express, Node, MongoDB)**, side project.
- Developed a full-stack application to send survey emails to a big list of customers 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 mini Amazon
 - Designed APIs and protocol buffers to coordinate communications between mini UPS and Amazon systems
 - Ensured reliability and "Exactly Once" with idempotent operations and retry mechanism
- Mar 2020 **HTTP Caching Proxy Server (C++, TCP Sockets, Concurrency)**, team work.
- Realized GET, POST, and CONNECT request handling, using daemon process and multi-thread
 - Improved performance with response caching, following rules of expiration time and revalidation in RFC
- Feb – May 2020 **Risk Network Game (Java, JavaFX, Concurrency, JSON, OOD, CI/CD)**, team work.
- Utilized Java for back-end, JavaFX and MVC design pattern for UI, and JSON for client-server communication
 - Used socket programming and multi-thread to support multiple players and a chat room
 - Participated in OOD and testing move/attack/upgrade/alliance algorithms
- Feb 2020 **Mini Google Protocol Buffer (Java, JSON, Gradle)**, individual project.
- Realized parsing class names and fields information from input JSON files, generating Java source code (serialization and deserialization methods included). Implemented cycle handling in object graph by unique ID
- Nov 2019 **Mini Linux Command Shell (C++, Multi-process, OOD, Valgrind)**, individual project.
- Developed and tested a command shell to change directory, set and export env variables, redirect and pipe
 - Refined with argument parsing of escape and quotation mark, and searching PATH variable for commands