Andrew Lin

Education

University of Waterloo

Sept. 2020 - Present

Candidate for Bachelor of Computer Science

Waterloo, Ontario

Technical Skills

Languages: C/C++, Java, Python, HTML/CSS, JavaScript, Golang, C#.Net, Groovy Developer Tools: Git, MongoDB, PostgreSQL, Jmeter, Heroku, Virtual Box, Selenium

Technologies/Frameworks: React, Node.js, Express.js, Socket.io, Django, PyGame, Ncurses, MFC, NuGet

Experience

Rocscience Sept. 2022 – Dec. 2022

Software Developer

Toronto, Ontario

- Utilized C++, MFC, and Codejock to implement an updated ribbon bar consisting of buttons, dropdown buttons, and an updated combobox component onto Settle3, their MFC desktop application, for product release
- Documented over 40+ frontend changes for future UI updates for all Rocscience's MFC desktop applications
- Worked with the product team and the UI/UX team to bring 25+ UI/UX improvements to Settle3
- Converted common core desktop application, file name assistance, and registry classes into NuGet Packages, simplifying the codebase and improving code maintainability
- Created and integrated Resource DLLs for MFC applications to support sharing of resources, an added a unique string ID system for context sensitive help support

OpenText Jan. 2022 – May 2022

Software QA Automation Developer

Waterloo, Ontario

- Developed automated tests to test REST APIs using Jmeter, and Groovy scripts to facilitate API response, performance, and load testing
- Wrote over 30+ test cases for REST API testing for OpenText's Remote Access Software
- Developed a TCP and UDP Client/Server console application using Golang and C#.Net for performance statistic baselines for performance testing
- Created a Golang console application that displays Windows performance counters for performance testing
- Implemented a Python web crawler to simulate web interaction to performance test OpenText's SOCKS client

Monest Dec. 2021 – May 2022

Software Developer

London, Ontario

- Implemented an email sign-up feature using React and Django to save user emails into a PostgreSQL database
- · Refactored code into multiple React components, improving code manageability and reusability
- Helped create a mobile friendly website that displays social and environmental data for clothing brands
- Implemented additional APIs to query database information for pollution, worker exploitation, and diversity data for clothing brands

InFlight (now Skuid)

May 2021 – Aug. 2021

Quality Assurance Analyst

Kitchener, Ontario

- Experience with manual regression testing, functional testing, black box testing and other testing practices
- Created test plans to test business enterprise systems and job application flows, increasing test coverage by 50%
- Automated testing processes with Selenium to test functional behaviour of job application flows

Projects

My-Chat-App | React, Node.js, Express.js, Socket.io, MongoDB

- Built a web-based chat application using the MERN stack that allows users to chat with other users privately
- Utilized Node.js, Express.js and MongoDB to create a REST API to query chat information and used Socket.io for websocket connections
- Implemented user authentication by storing usernames and encrypted passwords into a MongoDB database

ASCII Game Engine | C++, Neurses

- Implemented a game engine to support the creation of ASCII art video games that is able to handle sprite creation, collision handling and rebound physics
- Created the "Google Dinosaur Game" and the "Impossible Game" using the game engine

Breakout | Python, PyGame

- Recreate a simulation of Breakout with an additional multi paddle mode
- Implemented collision physics, music, and added a way to keep track of high scores