Jason Gill

Software Engineer Intern

Education

B.Sc. in Computer Science

Simon Fraser University

Sep 2020 – May 2025 | Burnaby, Canada

Professional Experience

Software Engineer Intern

May 2022 – Aug 2022 | Toronto, Canada

Ultimate Kronos Group

- Empowered customers to personalize their product suite by leading a full-stack custom branding project with Angular and Java Spring Boot
- Integrated API services using the Fetch library, handled state management with NgRx, and produced scalable APIs via Spring RESTful services
- Decreased page load times by 12.5% by disposing of outdated UI components and replacing them with inhouse, lightweight Design Language System (DLS) alternatives
- Conducted software verification with the JUnit and Jasmine testing frameworks, ultimately achieving > 85% method and class coverage

Projects

Bijou Budget Website (ReactJS, Java) ☑

- Developed an intuitive budget-tracking application using ReactJS, Java Spring Boot and MySQL that allows users to track recurring monthly expenses, log transactions, and filter them by month, year and expense
- Employed asynchronous HTTP requests with Axios and handled them with a Spring RESTful API service
- Deployed via Amazon Web Services (AWS) alongside an SSL/TLS encryption certificate

Computational Blockchain (Rust) 2

- Developed a work-based blockchain application in Rust with the SHA256 hashing algorithm
- Implements a producer-consumer work queue that concurrently mines blocks by distributing the workload among multiple worker threads
- Retrieves the first eligible proof value before draining the multi-threaded work queue, ensuring resource optimization

Galactic Grease Monkey (Java)

- Team lead on the production of a 2D Java game where I developed AI path-finding with the A* search algorithm, collision detection, object spawning, and game states
- Used the Java Abstract Window Toolkit to render graphics and the KeyListener interface to handle events
- Scheduled regular online & in-person agile-scrum meetings to ensure the smooth progression of the project

Weather & Traffic App (Python) ☑

- Composed a Python script that uses the Twilio API to send daily SMS notifications containing weather and traffic data retrieved from the OpenWeatherMap API and TrueWay Directions API
- Provides user recommendations based on recent weather and traffic data to avoid travelling inconvenience
- Deployed via the PythonAnywhere hosting service

Skills

Languages:

• JavaScript, TypeScript, Java, C, C++, Python, Rust, Haskell, Scala, SQL

Frameworks:

• ReactJS, Angular, Java Spring Boot, JUnit, Jasmine

Development tools:

• Git, MySQL, Twilio, Maven, Postman, Figma, Balsamiq, MATLAB, Axios, NgRx, RxJS, Amazon Web Services, Abstract Window Toolkit, Jupyter Notebook