Jason Gill

Software Engineer Intern

✉ jason_gill15@hotmail.com 📞 778-927-2848 📍 Vancouver, Canada ⚑ Portfolio

Education

B.A.Sc. in Computer Science   Sep 2020 – Dec 2024
Simon Fraser University   Burnaby, Canada
- Relevant Coursework: Data Structures & Algorithms, Operating Systems, Database Systems, Computer Networking, User Interface Design, Requirements Engineering

Professional Experience

Software Engineer Intern   May 2022 – Aug 2022
Ultimate Kronos Group   Toronto, Canada
- Empowered customers to personalize their product suite by leading a full-stack custom branding project with Angular and Java Spring Boot, where I integrated HTTP requests using the Fetch API, 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- Decreased page load times by 12.5% by disposing of outdated UI components and replacing them with in-house, lightweight Design Language System (DLS) alternatives
- Conducted software verification with the JUnit and Jasmine testing frameworks, ultimately achieving > 80% method and class coverage
- Collaborated with QA engineers and DevOps to fix bugs and analyze requirements

Projects

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

Galactic Grease Monkey ⬈
- 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 handle events via the KeyListener interface
- Scheduled regular online & in-person agile-scrum meetings to ensure the smooth progression of the project

Proof of Work Blockchain ⬈
- Developed a proof-of-work blockchain application in Rust with the SHA256 hashing algorithm
- Implemented 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

Weather & Traffic App ⬈
- 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

Poker Game ⬈
- Built a Java CLI poker game that recognizes all unique poker hands, determines the winners of any game, and displays the player rankings accordingly
- Designed with highly cohesive classes, validated with automated script testing in Python, and documented with Javadoc

Skills

Languages & Frameworks:
- Java (Spring Boot), C, C++, Python, Rust, Haskell, Scala, Javascript (ReactJS), Typescript (Angular), JUnit, Jasmine, SQL

Tools & Platforms:
- Git, MySQL, Twilio, Axios, Maven, Postman, Figma, Balsamiq, MATLAB, Axios, NgRx, RxJS, AWS (Elastic Beanstalk, Cloudfront, S3, Relational Database Service, Route53), Axios, AWT (Abstract Window Toolkit), Omnis Studio