Argavin Muralitharan

https://kavinmural.github.io/Argavin/

Bachelors in Computer Science (Business Option)

EDUCATION

University of Waterloo

Waterloo, ON

Expected Graduation: April 2022

Email: akmurali@uwaterloo.ca Github: github.com/kavinmural

EXPERIENCE

Ultimate Kronos Group

Toronto, ON

Software Engineer

Sept 2020 - Dec 2020, May 2021 - Present

- o Debugged, fixed, and tested defects using Java, JUnit5 and Mockito under time constraints.
- Refactored code to improve performance in different API calls, decreasing the calls' execution time by 30% to 50%. Verified changes using **Gatling** test scenarios and summarized test results.
- Created and ran **SQL** scripts in production environments to identify customer data sync issues.
- Migrated team's documentation to docs.io platform and introduced new documentation and on-boarding practices.
- Reviewed team members' code changes to improve code quality using **Bitbucket's** PR system.

Ultimate Software

Toronto, ON

Software Engineer

Jan 2020 - April 2020

- Designed, documented, and developed back-end APIs for mobile endpoints that respect the MVC design structure using **Java**, **Spring** and **SQL**.
- Developed and demoed end-to-end features using technologies including: **Spring**, **AngularJS**, **TypeScript**, and **MySQL**.
- Investigated, debugged and fixed defects involving both the front-end and back-end projects/technologies.
- Involved with initiative to convert the project's **JavaScript** files to **TypeScript** for Angular migration and testing for breaking changes.

Ultimate Software

Toronto, ON

Software Test Engineer

May 2019 - Aug 2019

- Designed and developed unit tests, integration tests, and regression tests using **Java** and **JUnit5** for various back-end APIs, improving code quality, integrity and test coverage.
- Developed GUI test automation scenarios using Cypress, increasing smoke test coverage by 60%.
- Aided in integrating the initial **Gatling** performance tests to track various API calls and setup performance scenarios.
- Refactored controller test automation to respect **Spring Security** endpoint authorization, enforcing a new team standard for controller unit tests.
- Investigated, reported and manually verified bugs/defects/performance enhancements.

PROJECTS

- Stock Portfolio API: Designed and implemented CRUD APIs responsible for tracking user's stock portfolio(s) with the ability to simulate buying/selling equities. Utilized Spring MVC, Spring Security, Spring JPA and design patterns to build the app's architecture. Implemented login and API authorization for client and admin roles.
- Crypto Trading Bot: Created a cryptocurrency trading bot that uses simple trading strategies to buy/sell BTC and ETH with real-time pricing using Binance websockets. Users have the choice to paper trade or authenticate with Binance's API to make real trades. Integrated concurrency so users can specify multiple trading strategies to run in different threads.
- Chess Game: Designed and implemented an interactive Chess game in a team that allows for player vs. player or AI. Integrated many design patterns in C++ including: Builder, Observer, Template, Factory, and Singleton. Implemented different levels of difficulties (CPU) and included a GUI to display the chess board.

Programming Skills

• Technical: Java, Spring Boot, Python, Typescript, C++, SQL, React, Git, Bash, HTML, CSS, Javascript