

ARGAVIN MURALITHARAN

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EDUCATION

Bachelor of Computer Science | University of Waterloo

Class of 2022 | Waterloo, ON

Relevant courses: Data Structures, Algorithms, Database Management, Operating Systems, User Interfaces, OOP, Compilers, Computer Networks, Security & Privacy

EXPERIENCE

Software Engineer | Ultimate Kronos Group

Aug 2022 - Present | Toronto, ON

- Contributed to migrating from OpenAM to Auth0 authentication clients for two different products, navigating significant architectural challenges by using techniques such as user impersonation, token management services, and creation of whitelisted endpoints.
- Developed a robust token refresh daemon service using **TypeScript**, **Angular**, **RxJS**, and **Java** to maintain session state for prolonged periods ensuring the end users had uninterrupted functionality for multiple days.
- Led resolution of a critical security defect, conducting thorough root cause analysis and leveraging **Splunk** for log monitoring. Responsible for deploying the fixes to production and back-porting to older versions while proactively communicating progress with customers. Mitigated the defect in time, safeguarding a million-dollar contract for the company.
- Optimized API performance through strategic refactoring of legacy code, incorporating techniques such as pagination, caching, query consolidation, and DTO mapping. Achieved an average 30% to 50% reduction in API execution time.

Software Engineer | CognisantMD

Sept 2021 - Dec 2021 | Toronto, ON

- Developed a configurable survey prompt feature using **Vue.js**, **Java**, **Spring**, and **MongoDB**. Enabled doctors and clinics to embed custom prompts and 3rd party surveys links within the application, increasing patient feedback collection by 30% compared to email-based methods.
- Developed a setup guide checklist feature using **Vue.js**, **JavaScript**, **HTML5**, and **CSS** to streamline user on-boarding. Simplified initial setup with clear instructions and progress tracking, reducing setup-related complaints.
- Managed customer escalations by promptly investigating issues and generating tickets with proposed solutions under tight deadlines.

Software Developer | Ultimate Kronos Group

Sept 2020 - Aug 2021, Jan 2020 - April 2020 | Toronto, ON

- Designed and implemented 20+ RESTful APIs for the UKG Pro mobile application using **Java**, **Spring**, and **SQL** databases. These APIs were tailored to streamline CRUD functionalities for mobile user-data operations, optimizing performance by eliminating unnecessary steps from web-based counterparts.
- Contributed to the migration of 300+ **JavaScript** files to **TypeScript** for the WFM Time sheet product, and conducting thorough testing to identify and mitigate potential breaking changes.
- Resolved critical defects with a focus on maintaining project timelines, achieving a 70% reduction in defect backlog. Utilized Test-Driven Development (TDD) to ensure comprehensive test coverage.

Software Test Engineer | Ultimate Software

May 2019 - Aug 2019 | Toronto, ON

- Designed and developed unit tests, integration tests, and regression tests using **Java** and **JUnit5** for various back-end APIs, thereby enhancing code quality, integrity and test coverage.
- Automated UI test scenarios using **Cypress**, resulting in a 60% increase in smoke test coverage.
- Contributed to the integration of initial **Gatling** performance tests to monitor API call response times and to configure various performance scenarios including concurrent user simulations.
- Refactored controller test automation to align with **Spring Security** endpoint authorization, establishing a new team standard for controller unit tests.
- Investigated, reported and validated defect fixes, performance enhancements, and code refactors under time constraints.

IT Analyst & Services | Toronto Transit Commission

May 2018 - Aug 2018 | Toronto, ON

PROGRAMMING SKILLS

Technical: Java, Python, SQL, Javascript, Angular, C, C++, MongoDB, Typescript, VueJs, ReactJs, Git, Bash, Splunk