# Uzonna Alexander

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#### **QA** Automation Developer

#### **EDUCATION**

#### Carleton University

Ottawa, ON

Bachelor of Computer Science Honours

Graduated April 2025

### PROJECTS

Job Application Tracker | Java, SpringBoot, PostgreSQL, Next.js, CI/CD, Jest, JUnit, Postman

- Built a fullstack job tracker with authentication, filtering, and real-time dashboards mirroring production use cases
- Developed automated test suites that identified over 15 logic and validation bugs across backend and frontend, ensuring 100% pass rate on GitHub Actions CI pipeline and stable multi-user support
- Implemented continuous integration pipelines in GitHub Actions to automatically run tests and validate application behavior on each commit
- Dockerized the backend to streamline local development and deployment, ensuring consistency across environments and easier scaling

### Selenium Card Game Automation Suite | Java, Spring Boot, Selenium, JUnit, HTML/CSS/JS

- Developed a real-time multiplayer browser game and integrated Selenium WebDriver to automate session-based interactions across multiple simulated users
- Implemented full end-to-end automation with JUnit and Cucumber, reducing manual testing time by 80% and reliably detecting UI state sync bugs during edge-case gameplay
- Designed in-game visual indicators to expose backend state transitions, enabling faster debugging and validation during automated test runs

#### Multi-Agent Reinforcement Learning Simulator | Python, Matplotlib

- Simulated competitive multi-agent RL environments to study policy evolution under varying social dynamics and resource constraints
- Tuned reward functions and analyzed metrics to diagnose convergence issues, reward hacking, and instability in sparse-reward setups

## EXPERIENCE

## Freelance Web Developer

May 2025 – Present

React, Next.js, Tailwind CSS

- Delivered a fully responsive website for a published author, improving mobile usability and reader engagement through optimized layout and fast load times
- Built modular components for biography, animated book listings, and scroll-triggered transitions, enhancing interactivity and user experience
- Deployed the site to production via Netlify with custom domain configuration and mobile-first performance tuning

## **Production Associate**

June 2021 – August 2024

KTH Shelburne Mfg.

Shelburne, ON

- $\bullet$  Collaborated with engineering, quality assurance, and production teams to address product defects, contributing to a 10% reduction in defects and improved workflows
- Assisted in quality control by conducting inspections and reporting any found issues, leading to corrective actions and consistent product quality
- Adapted quickly to new machinery and software, assisting team members and improving overall efficiency

#### TECHNICAL SKILLS

Testing & QA: Selenium WebDriver, JUnit, Jest, Cucumber, Postman

Backend & DevOps: Java, Spring Boot, PostgreSQL, GitHub Actions, Docker

Frontend & Scripting: JavaScript, TypeScript, React, Next.js, Tailwind CSS, Python, C++