

Darasimi Ajayi

782-409-0491 | DAjayi@dal.ca | [LinkedIn](#) | [GitHub](#)

EDUCATION

Dalhousie University

Bachelor of Computer Science

GPA: 4.17/4.30

Halifax, NS

Jan 2023 – Jan 2027

EXPERIENCE

Software Developer

May–Aug 2025

Nautel Ltd

Halifax, NS

- Enhanced automated testing infrastructure, reducing QA workload and improving test coverage by 25%.
- Authored and maintained 150+ end-to-end tests using Playwright and Cucumber, expanding coverage and preventing regressions earlier in the development cycle.
- Created and standardized 200+ unique Test IDs across application pages, with annotated documentation to streamline test creation and reduce QA/developer ambiguity.
- Improved repository health by introducing a repo-wide linter and enforcing test tagging conventions for Cucumber GWT scenarios.
- Implemented automated Git hooks (via Husky) to enforce code quality checks on every commit and push.

Full Stack Developer

Sep–Dec 2024

SimplyCast

Halifax, NS

- Individually resolved 50+ bug tickets, contributing to backlog reduction from 200+ issues to 90 as part of a 3-developer bug-fixing team, directly improving product stability.
- Diagnosed and fixed complex PHP issues using Chrome DevTools and Xdebug, reducing debugging time by an estimated 30% on high-priority cases.
- Delivered fixes across Angular, Vue, and PHP components, strengthening full stack development expertise and ensuring reliability in both frontend and backend modules.
- Collaborated with senior developers outside the bug-fixing team on complex issues, actively seeking feedback during solution planning and incorporating their guidance to strengthen code quality.
- Resolved 15 UI related bugs affecting layout and styling, improving visual consistency.

PROJECTS

Course Management System | *Java, Spring Boot, Vue 3, SQLite, GitHub*

Sep 2025 – Present

- Built a full-stack course management system to organize and track personal course load, addressing gaps I encountered with existing tools like Notion.
- Developed a Spring Boot backend with RESTful CRUD endpoints for courses and tasks, integrating SQLite for lightweight and dependable data persistence.
- Implemented a Vue 3 SPA frontend with Pinia and Vue Router, delivering reusable dashboards and course/task views for an intuitive user experience.
- Designed architecture with extensibility in mind, supporting future features such as GPA tracking, calendar synchronization, and deadline reminders.

2D Physics Engine | *C++, SDL3, Google Test, GitHub*

May 2025 – Present

- Developing a 2D physics engine from scratch in C++, leveraging SDL3 for rendering and input handling.
- Implemented collision detection, resolution, and forces such as air drag, impulse, and wind to simulate realistic object dynamics.
- Optimized performance to support 200 dynamic objects in real time, with ongoing scalability improvements and efficient rendering via two custom circle-drawing algorithms.
- Validated core engine functionality with Google Test, ensuring accuracy of physics calculations and reliability.

16-Bit CPU | *CircuitVerse, Java, CircuitVerse*

Feb 2023 – Present

- Designed and built a simulated 16-bit CPU from scratch using CircuitVerse, implementing 14 instructions with architecture extensible for future expansion.
- Implemented instruction logic manually with Boolean algebra and digital logic gates, constructing components such as the ALU, registers, and control unit.
- Validated all components and instructions through test cases, ensuring correctness and reliability of execution.
- Developed a custom assembly language in Java to program the CPU, enabling demonstration programs and laying the foundation for higher-level applications.

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, PHP, JavaScript (ES6+), SQL

Frameworks & Libraries: Spring Boot, Vue.js, AngularJS, SDL3