Hussein Saab

647-528-7842 | husseinsaab14@gmail.com | linkedin.com/in/huss-saab/ | github.com/husaab

EDUCATION

Toronto Metropolitan University (*formerly Ryerson*) — Toronto, Ontario
Bachelor of Science in Computer Science, Co-op — *Sep 2022 – Apr 2027*
- Faculty of Science Deans List: 2022 – Present

EXPERIENCE

Software Engineer: Backend & Automation Intern — May 2024 – Present
IBM — *Toronto, ON*
- Developed and tested software for IBM Supply Chain Intelligence Suite's Provisioning, User Management, and Access Control team using a Microservices Architecture with Java, Spring Boot, Kafka, Redis, and Cassandra
- Engineered microservices designed to simplify user access control and group management within the software. The microservices streamlined the process of assigning users to groups, managing permissions and ensuring secure access to features and data
- Designed, developed, and deployed a Kafka monitoring microservice using Kubernetes on IBM Cloud and Docker, enabling real-time consumption and tracking of over **5 million** events daily across **10+** microservices. Reduced manual monitoring efforts by **40%** and integrated the service with Instana dashboards through REST APIs, providing actionable insights into microservice health and performance
- Implemented REST APIs and enhanced existing ones with advanced features such as cursor/offset-based pagination, retry mechanisms, caching strategies, and JWT authentication. These improvements drastically increased performance, resulting in scalability, strengthened security, and a **65%** reduction in response times
- Automated integration and unit tests using JUnit, Mockito and Karate, achieving full code coverage along with proper regression testing; and streamlined testing processes with Jenkins pipelines, accelerating deployments by over **50%**

Full Stack Developer — Jan 2025 – April 2025
myAIpathway.ORG — *Toronto, ON*
- Worked as a Full Stack developer on an e-commerce platform for local farmers to sell their products online; utilizing Next.js, Tailwind and Typescript for the frontend and Node.js, Express, AWS RDS and JavaScript for the backend
- Engineered scalable REST APIs in Node.js/Express handling peaks of **18k** requests/day; achieved **100%** endpoint coverage via Chai tests, cutting production bug reports by **70%**
- Implemented Clerk authentication (email, Google, Facebook) with MFA for **400+** users, reducing failed logins by **60%** and boosting monthly active user retention by **25%**; built a Zustand-powered settings page for profile, password, and notification management.
- Architected and deployed a Node.js based SMTP email microservice using Nodemailer and AWS SES to deliver **5,000+** monthly order confirmations, shipping updates, and account notifications; integrated dynamic Handlebars templates and webhook-driven delivery tracking, cutting customer support inquiries by **60%**

Leader — May 2019 – Present
Canada Scouts — *Toronto, ON*
- Currently serving as a Scouts Leader, mentoring **30+** children ages 8–11 every Friday evening by planning and supervising weekly games, crafts, and outdoor adventures; organizing **20+** camping trips, sports tournaments, and educational lessons—to build teamwork, leadership skills, and community engagement.

PROJECTS

SchoolMule: Student Management | *TypeScript, Next.js, Node.js, Express, PostgreSQL* — September 2024
- Developed a full-stack web application using Next, Node and Express, enabling schools to manage student records, track grades, and generate automated report cards, reducing administrative workload by over **2000** hours annually
- Orchestrated adoption by **2** underfunded private schools, handling end-to-end deployment on Vercel and Railway; migrated and validated legacy student data, delivered hands-on training workshops and tailored user guides for over **40** teachers

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, TypeScript, C/C++, SQL, Rust, Bash
Frameworks: Spring, Spring Boot, Flutter, React, Next.js, Angular, Node.js, Express, Flask, Django, GraphQL
Developer Tools: Git, Docker, AWS, Jenkins, Kafka, Redis, Kubernetes, Linux/UNIX