

Hamza Alsarakbi

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EDUCATION

Carleton University

Honours Computer Science: Software Engineering | GPA : 3.8/4

Ottawa, ON

Graduation: April 2026

EXPERIENCE

Full Stack Developer, Part-Time

April 2025 - Present

Sarakbi Group

Remote

- Orchestrated the production deployment of an interim ERP ecosystem (ERPNext) on a self-managed **Linux** VPS, engineering automated CI/CD pipelines via **Gitea** and **Drone CI** for the company's web platforms.
- Architecting a high-performance custom ERP replacement using **Rust**, **React**, and **PostgreSQL** to migrate off ERPNext, fully integrating **WMS**, **CRM**, and accounting modules with an upcoming **e-Commerce** storefront.
- Engineered **Docker** and **Portainer** hosting for 5 web apps, integrating **Cloudflare** DNS with **Caddy/Nginx** reverse proxies to drive landing page **SEO/CRO** and establish edge routing for the upcoming storefront.

Full Stack Engineer

May 2024 - October 2025

Ouster

Ottawa, ON

- Spearheaded the migration of mDNS sensor discovery from **C++** to **Rust** to simplify provisioning, validating reliability via 72-hour stability testing.
- Designed 10+ high-performance RESTful APIs in **C++** and **Rust** to expose sensor, configuration, and analytics data to other services and UIs.
- Partnered with cross-functional teams to build a 3D client demo with WebSocket ingestion, directly supporting a potential multi-million customer acquisition.

Software Developer, Part-Time

July 2022 - April 2024

Billet Precision Ltd.

Ottawa, ON

- Managed the full lifecycle of a **React**/REST API corporate homepage and a customer order portal for 12 high-profile clients, utilizing **Docker** for in-house hosting.
- Built critical internal QA automation tools, increasing inter-departmental efficiency by 30%.

Software Developer

May 2023 - August 2023

GasTops

Ottawa, ON

- Developed a part-marking automation tool in **Dart** and **Flutter**, engineering a suite of 66 unit tests (91% coverage) to ensure strict adherence to aerospace quality standards.
- Reduced downtime in the part-marking process from 5 minutes to 20 seconds, boosting efficiency 15 times.
- Engineered a statistical analysis tool in **Rust/Svelte** to automate tolerance checks, increasing sampling rate from 2.5% to 100% and reducing scan time from 50s to 1s.

PROJECTS

2nd Place, Ciena Coding Challenge 2026

C | Docker | Devcontainer

- Co-developed a 2nd-place **C**-based optical router simulator, engineering a Protection Manager microservice and real-time UDP IPC on **Linux** to synchronize state across 4 microservices.
- Streamlined team velocity under a 4-hour deadline by provisioning **Docker DevContainers** for cross-platform parity and managing complex **Git** workflows to cherry-pick critical hotfixes.

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Rust | React | Node.js | TypeScript | Whisper

- Architected a highly scalable media processing pipeline in **Rust** on **Linux**, automating video extraction and leveraging GPU-accelerated Whisper models (**CUDA**) for temporal subtitle generation and translation.

GenAI Cyber Log Analyzer

Python | Docker | GHCR

- Engineered an automated DevSecOps microservice in **Python** utilizing **LangChain** and local LLMs to ingest raw Linux server access logs and classify network vulnerabilities, such as SQL injections and brute-force attacks.

TECHNICAL SKILLS

Languages: Rust, Java, Python, C/C++, SQL (Postgres), Dart, TypeScript, HTML/CSS.

Frameworks: React, Svelte, Next.js, Diesel, Tokio, Node.js, Express, PyTorch, Flutter, Tailwind CSS, Whisper, Ollama, Selenium, Playwright, LangChain, GraphQL.

Developer Tools: Git (GitHub, GitLab, Gitea), Cloudflare, AWS, Linux (Debian, Arch), Bash, CUDA, OpenCV, Docker, Portainer, Caddy, Nginx, Drone CI, Vercel, Google Cloud Platform, VS Code, DevContainers, Cursor, IntelliJ.