

# MOHAMED AZAB

Ottawa, Ontario, Canada

• 613-619-5360 • [mohamedazab@cmail.carleton.ca](mailto:mohamedazab@cmail.carleton.ca) • [linkedin.com/in/mohamedazabca](https://linkedin.com/in/mohamedazabca) • [github.com/mohazab2006](https://github.com/mohazab2006)

## EDUCATION

### Carleton University School of Computer Science

Bachelor of Computer Science, AI & Machine Learning, Cyber Security

Cumulative GPA: 3.90 / 4.00

Expected 2028

## RELEVANT COURSEWORK

- |                       |                          |                       |                      |
|-----------------------|--------------------------|-----------------------|----------------------|
| • Data Structures     | • Imperative Programming | • Linear Algebra      | • Calculus           |
| • Systems Programming | • OOP                    | • Discrete Structures | • Probability Models |

## EXPERIENCE

### Web Developer

October 2023 – Present

Freelance

Ottawa, Ontario

- Built and deployed full-stack websites for MILK Inc., Empower Orphans, and HT Clean using Next.js, TypeScript, Tailwind CSS, Supabase, and Docker, adding booking, donations, and API integrations.
- Managed self-hosted infrastructure with NGINX and Let's Encrypt SSL/TLS, improving security, reliability, and ongoing feature updates for these projects.

## PROJECTS

### Empower Orphans Website | Next.js, Typescript, Tailwind CSS, SQL (Supabase), Docker

December 2025

- Developed a modern full-stack website for a non-profit by integrating APIs for donations, event listings, and chapter management, enabling easier fundraising and volunteer coordination.
- Designed a responsive, mobile-friendly UI that improved accessibility and increased community engagement.
- Integrated APIs for donor communication, contact forms, and role-based access control (RBAC) to securely manage different chapters and administrators.
- Deployed on a self-managed VPS with SEO optimization, improving search visibility and online contributions.

### HT Clean Website | Next.js, TypeScript, Tailwind CSS, SQL (Supabase), Docker

July 2025

- Built a service-booking website integrating APIs for real-time scheduling, instant quotes, and lead capture, helping a local business streamline customer acquisition.
- Designed a fast, mobile-first checkout flow that reduced friction and boosted booking conversions.
- Connected APIs for contact/booking forms, automated confirmations, and admin alerts to speed up response times.
- Deployed on a self-managed VPS with SEO optimization, boosting local ranking and customer inquiries.

### School Library Management Database | Python (Django), JavaScript, HTML, CSS, SQL (Supabase)

January 2024

- Built a full-stack library management system to track books, Chromebook sign-outs, and overdue returns, reducing manual work for librarians.
- Developed a Django backend with RESTful APIs and Supabase (PostgreSQL) for secure, scalable data handling.
- Created a searchable inventory with subject filters, QR code scanning, and OCR to streamline librarian workflows.
- Implemented role-based access control (RBAC) for librarians, students, and administrators to enforce data security.

### Personal Home Server | Ubuntu, Docker, Bash, Python

November 2023

- Developed a self-hosted Linux server for file storage, media streaming, and hosting personal/client websites, reducing reliance on third-party hosting.
- Deployed and managed applications and websites using Docker containers to simplify setup and scalability.
- Configured NGINX reverse proxy and integrated free Let's Encrypt SSL/TLS certificates to enable secure HTTPS access for self-hosted websites.
- Configured VPN and SSH access for secure remote management and reliable uptime.
- Automated maintenance with Python scripts and Bash, handling updates and backups with minimal manual effort.

## TECHNICAL SKILLS

**Languages:** Python, Java, JavaScript, Typescript, HTML/CSS, C, SQL, Bash Scripting, C++ — English, Arabic, French

**Developer Tools:** VS Code, IntelliJ, Virtual Box, Git, GitHub, Docker, Linux (Ubuntu), Supabase, Turborepo, OpenStack

**Technologies/Frameworks:** Next.js (React), Node.js, Three.js, Tailwindcss, PostgreSQL, JavaFX, Pygames, React Native (EXPO), Django

## LEADERSHIP / EXTRACURRICULAR

### Empower Orphans Foundation

September 2024 – Present

Co-President

University Of Carleton

- Co-founded a non-profit dedicated to supporting orphans through fundraising, mentorship, and educational initiatives
- Led the development and management of the organization's website, ensuring accessibility and engagement.
- Implemented tech solutions to improve donor engagement while leading 30+ members and executives toward key goals
- Organized events and partnerships that expanded community reach and increased fundraising opportunities.