Omar Abdelhadi

🌐 omarabdelhadi.com

📞 343-777-0343 ✉ omarabdelhadi129@gmail.com 💼 linkedin.com/in/omarabdelhadi129 📁 github.com/omarabdelhadi129

Education

Carleton University   Sep. 2020 – Dec. 2024
Bachelor of Computer Science (Honours) - Artificial Intelligence and Machine Learning, GPA: 3.73/4   *Ottawa, Ontario*

Technical Skills

Languages: Python, Java, C/C++/C#, HTML/CSS, JavaScript, TypeScript, SQL
Tools & Frameworks: Node.js, React, Tailwind, Next.js, Docker, Jenkins, Git, GitHub, Bitbucket, Vite, NumPy, Pandas
Cloud & DevOps: AWS, Azure, CI/CD Pipelines, Kubernetes, Terraform, Jira, Blackduck
Databases: MySQL, MongoDB, Microsoft SQL Server
Operating Systems: Linux, Mac, Windows

Experience

Junior Software Developer   Jan 2024 – Current
3 Canadian Space Division (DND)   *Ottawa, Ontario*
- Automated Space Domain Awareness tasks by developing robust **Java** back-end components using **Maven** and **Spring**, and interactive **React** front-end interfaces built with **Vite**, optimizing data processing and user experience.
- Collaborated with a multidisciplinary team, utilizing **Kafka**, **Docker**, and **SQL** to implement key features for the Space COP application, enhancing space domain awareness and monitoring capabilities.
- Engaged in **Agile/Scrum** development, contributing to feature enhancements and operational efficiency, while helping onboarding and training new student developers.

Software Engineering Intern   Sep 2022 – Aug 2023
Barracuda Networks LTD   *Ottawa, Ontario*
- Developed and maintained **.NET C#** microservices and aggregator services, along with a **React** front end utilizing **TypeScript**, and automated workflows and builds using **CI/CD pipelines** for the Barracuda SMP app.
- Actively participated in planning and decision-making meetings, collaborating with the team to address required changes and assigning tasks based on team members' focus areas.
- Managed and maintained the front-end repository, reviewing pull requests and setting up **workflows** and build actions in **GitHub**, ensuring code quality and adherence to best practices.

Web Developer Intern   May 2022 – Aug 2022
Getit Local Technologies   *Ottawa, Ontario*
- Developed automated test plans and scripts to identify software issues using **TestFlight** and **Android Studio**.
- Collaborated with engineers to design innovative products for Getit applications, tracking progress with **Jira** and **Git**.
- Built responsive SPAs using **React Native** for mobile and **React** with **JavaScript ES6** for web, enhancing user experience across iOS and Android platforms using **XCode** and **Android Studio**.

Teacher Assistant   Jun 2021 – Current
Carleton University   *Ottawa, Ontario*
- Assisted in web development courses, guiding students through programming labs and workshops using **JavaScript**, **Python**, and **Java**.
- Led weekly labs, workshops, and office hours to help students with web development concepts and code debugging in **JavaScript**, **Python**, and **Java**.
- Collaborated with academic staff to improve course materials and enhance the student learning experience in web technologies.

Projects

Canny Edge Detector | *Python*   Jan 2024
- Implemented the **Canny Edge Detection** algorithm, incorporating techniques such as **Gaussian blurring**, gradient calculation, and edge tracking by hysteresis to identify edges in images.
- Visualized the results on various images with different **sigma** and **threshold** values, demonstrating potential use cases for lane detection technology.

AED Simulation Software | *QT C++*   Dec 2023
- Developed an **AED Simulation** prototype to simulate the critical functionalities of an Automated External Defibrillator (AED), improving user preparedness for cardiac emergencies.
- Designed the system to guide users through heart rhythm analysis, shock administration, and provide real-time support during emergencies.