Sama Al-Oda

 $\frac{647\text{-}891\text{-}7557 \mid \underline{samaaloda@gmail.com} \mid \underline{linkedin.com/in/sama.al.oda} \mid \underline{github.com/samaaloda} \mid \underline{samaaloda.com} \mid \underline{EDUCATION}$

McMaster University

Hamilton, ON

Bachelor of Engineering in Software & Biomedical Engineering

Sep. 2023 - Expected May 2027

- Dean's Honor List with a current cGPA of 3.97 on the 4.0 scale.
- Recipient of both the Engineering Award of Excellence, and Diversity Scholarship.

EXPERIENCE

Web Developer

August 2025 – Present

Ibtikar Toronto Toronto, ON

- * Developing and maintaining a responsive web platform using Next.js, React, & TailwindCSS for 1,000+ users.
- * Integrating APIs to deliver dynamic, real-time content and enhance user interaction across multiple features.

Machine Learning & App Development Research Assistant

May 2025 – Present

 $McMaster\ University$

Hamilton, ON

- * Built and trained **classification models** using Random Forest and K-Nearest Neighbour algorithms, improving accuracy through data preprocessing and parameter tuning.
- * Developed a full-featured 1,500+ line SwiftUI mobile app, entirely independently, from concept to launch, implementing authentication, real-time data sync, and Supabase API integration.
- * **Designed** UI/UX in Figma and prepared polished demos and technical documentation for publication as part of a research paper.

Software Technical Team Member 🗘 🔗

September 2024 - May 2025

HealthHatch

McMaster University

- * Worked with a software team to build a ML tool in Python to process X-ray data to detect bone fractures.
- * Detected in over 90% accuracy of 12+ diseases and disorders, trained using over 10,000 images.
- * Built and established a friendly user-interface to input X-ray images, with AI-driven chatbot for feasibility.

PROJECTS

KareBear | ReactNative, JavaScript/TypeScript, Expo, Google Cloud API 🗘 🔗

February 2025

- * Winning project at ElleHacks, a hackathon for women (& others) in tech, selected from 300+ participants.
- * Integrated Google Cloud Vision, React Native, Google Cloud APIs and Gemini AI into an interactive plushie, enabling real-time emotion detection and speech-based learning for children with ASD aged 2-8.

SkipTheLine | JavaScript, ReactNative, Expo, MongoDB 🗘 🔗

February 2025

- * Designed and developed a ride queue app that allows users to enqueue themselves for attractions in real time.
- * Developed a smart scheduling algorithm based on wait times and the user, maximizing park efficiency.
- * Integrated Google Maps Platform API to display ride locations on an interactive park map.

LEADERSHIP & TECHNICAL EXPERIENCE

Design Projects in Engineering Teaching Assistant

August 2025 – Present

McMaster University

Hamilton, ON

- Assist in delivering engineering design labs for 25 students per section, aiding in CAD, programming, and prototyping skills.
- Evaluate deliverables (design reports, code submissions, presentations) and provide constructive feedback.

Wellness Coordinator @ MES

 $May\ 2024 - May\ 2025$

McMaster University

McMaster Engineering Society (MES)

- Manage the Wellness Division of for an engineering community of over 7000 students.
- Lead a team of 5 executives to plan and market engaging events throughout the year.

TECHNICAL SKILLS

Languages: SwiftUI, JavaScript, TypeScript, Java, Python, C, HTML/CSS

Frameworks: React, Node.js, Next.js, Expo, ReactNative, FastAPI

Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, Eclipse, Vim

Libraries: pandas, NumPy, Matplotlib, TensorFlow, PyTorch