Shervin Darmanki Farahani

647-916-0759 | shervindarmankifarahani@gmail.com | linkedin.com/in/s-d-f | sherv01.github.io

EDUCATION

University of Toronto

Toronto, ON

Bachelor of Applied Science in Computer Engineering + PEY Co-op Minor in Artificial Intelligence Engineering and Engineering Business

Expected 2028

• Relevant Courses: Programming Fundamentals, Digital Systems, Computer Organization, Software Design and Communication, Signals and Systems

Bachelor of Applied Science in Engineering Science, Dean's List Scholar

Sep. 2023 - May 2024

• Relevant Courses: Introduction to Computer Programming, Computer Algorithms and Data Structures

EXPERIENCE

Full-Stack Web Developer

October 2024 – Present

University of Toronto Web Development Club

Toronto, ON

- Collaborated with 4 developers using **Git** to build **20+ React components** with **shaden UI** and **Tailwind CSS**, achieving 98% responsiveness across 5 core site features, and improving user experience for **over 200 students**.
- Designed and implemented **CRUD endpoints** for a **FastAPI** backend, enabling dynamic data management for multiple website features, integrated with a **PostgreSQL** database managed via **Alembic**.
- Used React Query to fetch and display real-time data from backend APIs, enhancing UX for 5+ pages.

Cloud-Integrated Software Developer

January 2025

U of T Hacks Hackathon

Toronto, ON

- Engineered a full-stack web application that processed over 100 data points in real time by integrating AWS S3 for deployment, intermediate file storage, and multimedia management, alongside AWS Lambda for API call processing from the Gemini API and video processing from the S3 buckets.
- Automated infrastructure deployment using **Terraform**, reducing manual setup time by 40% and enhancing scalability for AWS services.
- Designed and developed a dynamic **React front-end**, achieving a 40% increase in user feedback.

Full-Stack IoT Developer

February 2025

Make U of T Hackathon — Winner of 'Best Use of Streamlit' Category

Toronto, ON

- Designed a Flask-based REST API for real-time data streaming and control, achieving $\leq 200 \text{ms}$ latency
- Developed and optimized a Convolutional Neural Network using TensorFlow Lite for Raspberry Pi, achieving 70% accuracy in classifying 5 crop types from live camera feeds
- Architected a Streamlit dashboard for real-time telemetry and control with 5+ components for improved UI

Projects

OpenStreetMap Mapper Software (ECE297 Project) | C++, CSS, Git

January 2025 – May 2025

- Designed and implemented an **efficient API** for querying and processing OSM street data, achieving $\mathcal{O}(1)$ average case look-ups through optimized data structures (e.g., **hash maps, tries**)
- Integrated GTK and EZGL libraries to render OSM maps with real-time zoom, pan, and search functionality, supporting up to 10,000+ map elements with ≤ 100 ms rendering latency
- Solved a traveling salesman-style problem by implementing a multi-target Dijkstra's Algorithm as well as Simulated Annealing and 2/3-opt moves, reducing travel time by 16%.

Cover Letter Input Chrome Extension | JavaScript, Node.js, HTML, CSS

May 2025 – Present

- Built a Chrome extension with Manifest V3, achieving overlay injection for 95% of tested DOM environments.
- Integrated Gemini API via Node.js, enabling AI-generated cover letters with 80% reduction in writing time.
- Utilized MutationObserver to detect file inputs dynamically, supporting 100% compatibility with standard DOM, Shadow DOM, and iframes on 50+ tested websites.
- Implemented **jsPDF** for PDF generation, and optimized event listeners by using idempotent logic.

SKILLS

Technical: C, C++, Python, JavaScript, Kotlin, AWS S3, AWS Lambda, React, Node.js, Tailwind CSS, SQL, Next.js, Flask, HTML, CSS, Git, SciKit-Learn, PyTorch, Terraform, Docker, Streamlit, Figma, TensorFlow, Browser Extension Development, Data Structures & Algorithms, Object Oriented Programming, Machine Learning, Embedded Systems Soft: Organization, Interpersonal Communication, Critical Thinking, Problem Solving, Fast Learner