

DORIS LAM

doris.lam@uwaterloo.ca | [linkedin.com/in/dorislam23](https://www.linkedin.com/in/dorislam23) | github.com/Doris-Lam | dorisslam.ca

EDUCATION

University of Waterloo

Bachelor of Applied Science in Computer Engineering

Sep 2024 – Present

Waterloo, ON

- Relevant Coursework: Data Structures and Algorithms, Linear Algebra for Engineering, Discrete Mathematics and Logic 1

SKILLS

Languages: Python, Java, C++, C#, C, Go, JavaScript, TypeScript, Swift, Bash, SQL, HTML, CSS

Technologies: React, Flask, React Native, Next.js, OpenCV, TensorFlow, PostgreSQL, MySQL, WatermelonDB, Firebase

Tools: Git, Cursor, Xcode, Node, Docker, GCP, Firebase, Branch, MongoDB, Postman, Jest, Cypress, BigQuery

EXPERIENCE

Software Engineer

Sep 2025 – Dec 2025

San Francisco, CA

Voxer

- Launched a new web client platform in **React Native**, scaling the platform to support **40M+** users by rebuilding core interfaces, migrating legacy features, and implementing high-performance real-time messaging components
- Built a real-time audio streaming pipeline using **WebAssembly** and **HTTP/2**, reducing audio latency to **<200ms**
- Developed an offline-first messaging system with **WatermelonDB** schema migrations and cross-device sync, ensuring **100%** local message access and delivering reliable message consistency online or offline
- Containerized production services using multi-stage **Docker** builds and Envoy dynamic proxy routing, enabling **zero-downtime deployments**, more reliable traffic handling, and a **50%** reduction in infrastructure costs
- Implemented **Firebase Analytics** with structured event tracking, processing **15M+** daily events piped into **GCP** for aggregation and analysis, enabling scalable product insights with **99%** event delivery accuracy
- Created automated testing in **CI/CD** using **Jest** and **Cypress** end-to-end suites, increasing test coverage by **15%** and reducing production regressions by **25%**

Founding Engineer

May 2025 – Aug 2025

Toronto, ON

HormoneFit

- Shipped a HIPAA-compliant telehealth platform targeting menopause and infertility care using **React**, **Next.js**, **TypeScript**, and **Tailwind**, enabling secure patient onboarding for **1,200+** users and **15+** healthcare specialists
- Built a video consultation and real-time chat platform using **Agora SDK**, optimizing streaming with **<100ms** latency and **99.8%** connection reliability
- Designed and implemented **RESTful APIs** with **Express.js** and optimized **MongoDB** schemas, enabling secure access to patient records and improving data retrieval efficiency by **40%**

PROJECTS

My AI Mentor | Python, FastAPI, TypeScript, Google Gemini, Monaco Editor

Nov 2025

- Developed a full-stack AI-powered code analysis and suggestion platform using **Python**, **FastAPI**, **React**, and **TypeScript**, enabling real-time code analysis and AI-driven suggestions for **9** programming languages
- Built a real-time AI code review system by integrating **Google Gemini** with **Monaco Editor** decorators and intelligent debouncing, reducing API calls by **70%** to deliver instant, context-aware feedback
- Implemented a secure sandboxed code execution engine in **Python** with temporary-directory isolation, subprocess timeouts, and automatic resource cleanup, safely running untrusted code with **zero system contamination**

Snout | Go, Lingva Translate API

Jul 2025

- Designed and implemented a programming language interpreter in **Go**, building a custom lexer, parser, AST evaluator, object system, and REPL to support variables, functions, arrays, hash maps, conditionals, and built-in methods
- Integrated French-localized runtime output, integrating **Lingva Translate API** with a dictionary fallback to translate strings, booleans, null, and interpreter error messages, including parser error handling with ASCII visual feedback

SignSpeak (uOttahack First Place) | React, Next.js, Node.js, TensorFlow, MediaPipe, HTML, CSS

Feb 2023

- Built a real-time sign language recognition model using **TensorFlow** and **MediaPipe** to map hand landmarks and classify gestures against predefined ASL signs, improving accessibility for hearing impaired users and providing an interactive learning experience
- Architected a learning platform using **Next.js**, **React**, and **Node.js**, implementing adaptive training modules, reusable components, and API routes, delivering scalable content and winning **uOttahack First Place**