

Alex Li — Software Engineer

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Skills

Languages: Python, TypeScript, JavaScript, Go, C++, C, Kotlin, Java, Bash, SQL

Technologies: AWS, GCP, Docker, Next.js, React Native, Svelte, Angular, GraphQL, MongoDB, Postgres, Node

Certificates: AWS Certified Developer, AWS Certified Cloud Practitioner

Education

University of Waterloo

2020–2025

Bachelor of Computer Science

- Coursework: Algorithms, Distributed Systems, Operating Systems, Database Systems, Machine Learning
- Award: President's Scholarship of Distinction

Employment

Full Stack Developer, Reimagine Health

Toronto, Sep 2024 – Present

Patient Scheduling Platform for modernmenopause.ca

- Automated notifications using an asynchronous task queue scheduler (Agenda.js with MongoDB) that runs cron jobs to send SMS and email notifications with Mailchimp and Resend.
- Built a medical blog platform integrated with WordPress GraphQL API to serve articles via SSR with SEO.
- Integrated Firebase and Stripe's checkout flow for seamless transactions and authentication, generating \$100K+ in revenue.
- Leveraged Next.js and React Native to deliver features for both web and mobile platforms.

Software Developer, Nuralogix

Toronto, Jan 2024 – Apr 2024

UI Design System

- Designed and documented a UI Design System, standardizing components across core applications.
- Developed a React component library using Storybook, Vite, and StyleX; published as npm packages.
- Achieved 80% test coverage on Unit and E2E tests (Vitest, Puppeteer) to improve code maintainability.

Software Developer, Proceve

Grimsby, May 2023 – Sep 2023

Project Management Application for proceve.com

- Collaborated closely with UI/UX designers on Figma to deliver consistent views (i.e Kanban, List, Timeline) with SvelteKit.
- Developed REST API endpoints on top of Go's Gin framework to provide robust hierarchical artifact management services.
- Contributed to optimizing Go struct designs for project artifacts, enabling better traceability with automated dependency tracking across requirements, tasks, and test cases.

Software Engineering Intern, Super.com

Toronto, Sep 2022 – Dec 2022

E-Commerce Platform

- Developed features for an E-commerce storefront using the Next.js framework with TypeScript, MUI, and BigCommerce API.
- Enhanced product page load times by 15–20% through a hybrid architecture, leveraging REST to generate static content and GraphQL to handle dynamic queries.
- Spearheaded E2E testing automation with WebdriverIO, following TDD practices to overhaul manual tests, reducing regression testing time by 70% and leveraging GraphQL to pull staging data for realistic test cases.

Projects

DebateModAI (GitHub, Demo):

- Developed an AI-powered debate SaaS platform with real-time interactions, speech analysis, and feedback capabilities.
- Leveraged Livekit's SDK to produce a pipeline voice agent (Deepgram Nova-2 STT, OpenAI LLM, GCP Cloud TTS).
- Integrated Firebase with Clerk to create secure authentication flow (API endpoints and route validation with Clerk middleware, custom JWT token Firebase signin, and database rules for authenticated read and write access).

A-Maze-ing (GitHub, Demo):

- Built a 3D maze game where players can compete for points on a public leaderboard using Svelte, SkeletonUI, and Go.
- Designed a PostgreSQL database schema using Entity-Relationship Diagrams (ERDs), modelling essential game requirements.

Network:

- Implemented a RDT protocol over UDP, mimicking TCP to ensure accurate data transmission across unreliable networks.
- Configured network topologies on virtual Software Defined Network using Mininet's Python API and OpenFlow protocol.

Operating System:

- Developed core OS functionalities in OS161 using C, including process scheduling, concurrency (semaphores, locks), memory management, and file system operations (syscall into kernel).