

HYOSEO LEE

h72lee@uwaterloo.ca | linkedin.com/in/hyoseo-lee | github.com/hyoseo837 | hyoseo.dev

TECHNICAL SKILLS

Languages : Python, TypeScript, C/C++, SQL

Full-Stack : React, FastAPI, REST APIs, PostgreSQL, SQLAlchemy, React Query

AI & Services : Gemini API, LLM Integration, Supabase, Stripe, JWT Auth

Cloud & DevOps : Docker, AWS, DigitalOcean, GitHub Actions, Caddy, Vercel, Pytest

EDUCATION / CERTIFICATIONS

University of Waterloo

Waterloo, ON

Bachelor of Computer Science, Honours, Co-operative Program (92.33% GPA)

Sep 2023 – Present

- **President's Scholarship** (2024) — awarded for academic excellence on admission; **Term Distinction** every enrolled term
- **Relevant Coursework**: Object-Oriented Software Development, Logic and Computation, Data Structures and Algorithms

Microsoft Certified: Azure Fundamentals (AZ-900 & AI-900)

Remote

Cloud architecture, Azure services, and core AI/ML concepts

Jun 2024

PROJECTS

WaterlooWorks AI Assistant | TypeScript, React, FastAPI, PostgreSQL, Stripe, Gemini API | Jun 2026

- Designed, built, and **shipped a monetized full-stack SaaS solo to the Chrome Web Store**: a browser extension that injects AI-generated fit-scores into co-op postings to automate manual job screening.
- Engineered a FastAPI backend with async PostgreSQL, a Stripe-based credit system, and an append-only billing ledger, isolating all Gemini prompts server-side to protect scoring logic.
- Secured the platform with Microsoft (UWaterloo) SSO and per-user rate limiting, backed by automated tests over critical billing and scoring paths.

Macro Dashboard | React, FastAPI, SQLAlchemy, PostgreSQL, Docker, DigitalOcean | May 2026

- Built a production-grade financial terminal with a customizable React UI, aggregating real-time market data and RSS news from **22 global sources** into drag-and-drop widgets with live sparklines.
- Engineered an async FastAPI backend with SQLAlchemy ORM, hand-rolled JWT authentication, and background schedulers for continuous data sync, deployed via Docker Compose on DigitalOcean behind a Caddy auto-HTTPS reverse proxy.

Dchup — Flashcard Web App | React, TypeScript, FastAPI, SQLAlchemy, AWS (EC2, RDS) | Jul 2024

- Built a full-stack learning platform with a FastAPI backend and a React/TypeScript frontend, supporting cardset creation, flashcard CRUD, and public/private sharing.
- Implemented JWT authentication with separate access and refresh tokens and ownership-based access control, secured with bcrypt hashing, and deployed the backend on **AWS EC2/RDS**.

CxC Hackathon — Wildfire Analysis | Python, Pandas, NumPy, scikit-learn | Feb 2024

- Engineered a Random Forest model on **22,000+ Alberta wildfire records**, using fire-weather features (spread rate, temperature, humidity) to predict burn-size classes at a **0.95+ F1 score**.
- Won the **MEF Award** among dozens of teams for analytical insight into the environmental and economic impact on **indigenous communities**.

EXPERIENCE

Squad Leader, Fuel Supply Platoon

Gyeonggi, South Korea

Republic of Korea Army (ROKA)

Oct 2024 – Apr 2026

- Promoted to squad leader for the final 5 months, directing a **14-soldier squad** in daily fuel-supply operations within a safety-critical environment, sustaining **zero safety incidents**.
- Maintained reliable battalion fuel logistics under physically demanding, time-pressured conditions across an 18-month service term.