Hyoseo Lee

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Technical Skills

Languages: Python, TypeScript, C/C++, SQL
Data: pandas, NumPy, scikit-learn, Parquet, data pipelines
Full-Stack: React, FastAPI, REST APIs, PostgreSQL, SQLAlchemy, React Query
AI & Services: Gemini API, OpenAI API, LLM Integration, Supabase, Stripe, JWT Auth
Cloud & DevOps: Docker, AWS, Azure, DigitalOcean, GitLab CI/CD, GitHub Actions, Caddy, Vercel, Pytest, Ruff

Education / Certifications

University of Waterloo — Waterloo, ON, Canada
*Bachelor of Computer Science, Honours, Co-operative Program (**91.75% Cumulative Avg.**)* — *Sep 2023 – Present*

- **President's Scholarship** (2024) for academic excellence; **Term Distinction** every term with posted honours
- **Relevant Coursework**: Object-Oriented Software Development, Logic and Computation, Combinatorics, Probability

Microsoft Certified: Azure Fundamentals (AZ-900 & AI-900) — Remote
WE Accelerate (Azure & AI) — work-integrated learning program with Microsoft — *Jun 2024*

Experience

Data Processing Developer Intern — Ottawa, ON, Canada
Statistics Canada — *Sep 2026 – Present*

- Refactoring a legacy **11-stage national survey processing pipeline** in Python (**pandas**, **Parquet**) onto a new standardized platform and templates, fixing errors in previously untested code.
- Building the pipeline's first **pytest** test suite, with **GitLab CI/CD** enforcing build, **Ruff** lint, and test stages on every merge.

Squad Leader, Fuel Supply Platoon — 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**.
- Kept battalion fuel logistics reliable under time-pressured conditions across an 18-month mandatory service term.

Projects

WaterlooWorks Extension | *TypeScript, React, FastAPI, PostgreSQL, Stripe, Gemini API* | — Jul 2026

- Designed, built, and **shipped a monetized full-stack SaaS solo to the Chrome Web Store**: an extension that rates co-op postings against a student's profile, **scoring 1,749 real postings** in production.
- Engineered a FastAPI backend with async PostgreSQL, a Stripe-based credit system, and an append-only billing ledger, isolating Gemini prompts server-side, secured with Microsoft (UWaterloo) SSO.

HN Scroller | *Python, OpenAI API, Vanilla JS, GitHub Actions* | — Sep 2026 – Present

- Built a swipe-style Hacker News digest with **no server and no dependencies**: a nightly GitHub Action has an OpenAI model summarize stories into one JSON file, and the commit itself is the deploy.
- Runs fully automated for **about $6 per month** in API costs.

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

- Built a financial terminal aggregating market data and news from **22 global sources** into drag-and-drop widgets, with an async FastAPI backend and JWT auth, deployed via Docker.

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

- Trained a Random Forest on **22,000+ Alberta wildfire records**, predicting burn-size class at **0.95+ F1**.
- Won the **MEF Award** for analysis of wildfire impact on **Indigenous communities**.