Lin Hong

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10× Hackathon Winner · Full-Stack Engineer · Enterprise Solutions Developer

EDUCATION

University of Waterloo   Sept 2024 – Apr 2028
Bachelor of Computer Science (Co-op)
- President's Scholarship of Distinction, Ted Rogers Future Leaders Scholarship for Women
- Relevant coursework: Algorithm Design, Data Structures, Database Systems, Software Engineering

SKILLS

Languages: Python, Go, JavaScript, TypeScript, Java, SQL, Bash
Technologies: React, Next.js, FastAPI, Flask, PostgreSQL, MongoDB, Docker, Redis, Git, AWS
Systems: REST APIs, microservices, data modeling, third-party integrations, scalable architectures

EXPERIENCE

Walnote AI   July 2025 – Present
Founding Engineer   *Toronto, ON*
- Designed and implemented end-to-end scalable platform using **FastAPI**, **PostgreSQL**, and **Redis**, delivering production-ready solutions for enterprise customers with real-time data synchronization, event broadcasting, and role-based access control.
- Built authentication system with **WebSockets** and integrated third-party services, optimizing data models and database schemas; architected distributed system with **Docker** and **Celery** workers, reducing processing time by 5×.
- Deployed frontend to Vercel and backend to Render using Cloudflare R2 and **GitHub Actions** CI/CD, ensuring reliable deployment workflows for customer-facing features.

Linovation Design   Summer 2024
Full Stack Developer   *Toronto, ON*
- Delivered 8 production websites end-to-end using **Next.js**, **React**, and **TypeScript**, collaborating directly with clients to understand requirements and ship high-quality features.
- Developed scalable **Flask** REST APIs with JWT authentication, **PostgreSQL** integrations, and third-party service connections; deployed using **Docker**, Vercel, and MongoDB.
- Worked closely with design teams using Figma to translate mockups into responsive, production-ready interfaces that met client specifications and business objectives.

PROJECTS

Skip the Walk | *Terraform, Commander.js, Slack API*   Sept 2024
- Built CLI tool automating workflows and integrating third-party APIs (**Slack**, Mappedin) with **Terraform** orchestration, solving real business pain points; won Best Use of Terraform at Hack the North 2024.
- Integrated Mappedin for indoor navigation and automated Domino's ordering with retry logic, demonstrating ability to connect multiple external services and deliver end-to-end solutions.

Flaim Brain | *Flask, LangChain, MongoDB*   Jan 2024
- Developed full-stack AI platform with **Flask** backend and **MongoDB** data models, implementing file uploads, semantic search, and personalized features; placed 4th at Hack the Valley 8.
- Integrated GPT-4, Cloud Vision, and MongoDB Atlas Vector Search for semantic retrieval, demonstrating ability to combine multiple third-party services into cohesive product experiences.

HomeLab | *Linux, Docker, Nginx, Cloudflare*   May 2025 – Present
- Architected personal infrastructure with **Docker** containerization, **Nginx** reverse proxying, and Cloudflare routing, demonstrating understanding of scalable systems and enterprise-level deployment patterns.
- Built secure Linux server with SSH authentication and HTTPS reverse proxying, deploying Dockerized Node.js apps with PM2 process management, health checks, and centralized logging.