

# Lin Hong

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10× Hackathon Winner · 2× Founding Engineer · Systems & Full-Stack Developer

## EDUCATION

### University of Waterloo

Sept 2025 – Apr 2029

*Bachelor of Computer Science (Co-op)*

- President's Scholarship of Distinction, Ted Rogers Future Leaders Scholarship for Women
- Relevant coursework: Intro to CS, Algorithm Design, Data Abstraction, Calculus 1 & 2

## SKILLS

**Languages:** Go, Python, Java, C++, JavaScript, TypeScript, Bash, PHP, HTML/CSS, Tailwind

**Technologies:** Git, Next.js, React, Flask, FastAPI, Docker, AWS, PostgreSQL, Redis, Nginx, Cloudflare R2

**Systems:** TCP/IP & DNS fundamentals, reverse proxying, RESTful API design, microservices orchestration

## EXPERIENCE

### Walnote AI

July 2025 – Present

*Founding Engineer*

*Toronto, ON*

- Cut rendering latency 5× by chunking video jobs across Celery workers with **Redis** queues, parallel **ffmpeg** stages, and resilient retries.
- Delivered real-time collaboration via Clerk, WebSockets, and **Redis** pub/sub writing through to Neon **PostgreSQL** with caching safeguards.
- Shipped containerized **FastAPI** services with health checks, rate limits, structured logging, and **OpenTelemetry** tracing, deploying via **Docker** to Render/**Vercel** with assets on **Cloudflare** R2 and CI/CD in GitHub Actions.

### Linovation Design

Summer 2024

*Full Stack Developer*

*Toronto, ON*

- Shipped 8 production websites with Next.js/**TypeScript** and Tailwind, coordinating Figma designs with CI previews to accelerate feedback.
- Built **Flask** APIs with JWT auth, database integrations, and **Docker** deployment across Vercel and MongoDB to harden releases.

## PROJECTS

### HomeLab | *Linux, Docker, Nginx, Cloudflare*

May 2025 – Present

- Provisioned a Linux server with SSH keys, TLS termination, and **Nginx** reverse proxying routed through **Cloudflare** DNS/proxy for secure access.
- Run containerized services with **Docker** and PM2, adding health checks and centralized logs for quick rollback.

### Spotilike | *Flask, Next.js, TensorFlow, DeepFace*

June 2025

- Built an AI-driven music discovery app linking emotion embeddings to tracks with **TensorFlow** and **DeepFace** inference.
- Served recommendations through **Flask** APIs and a **Next.js** frontend integrating Spotify for real-time playback, tuned with batched inference to keep responses snappy.

### Skip the Walk | *Terraform, Commander.js, Slack API*

Sept 2024

- Built a CLI automating Domino's ordering and volunteer routing with **Terraform**-defined workflows and Slack notifications.
- Integrated Mappedin indoor navigation plus retries and per-step logging to keep runs resilient across flaky venue Wi-Fi at **Hack the North**.

### Inner Voice | *Next.js, Whisper, OpenAI TTS*

July 2023

- Built a multi-persona speech AI app with full STT/TTS accessibility in **Next.js**, streaming audio through **Whisper** for low-latency responses.
- Orchestrated OpenAI persona generation and conversation flows with rate-limit aware queueing to keep dialogs fluid.