

Lin Hong

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10× Hackathon Winner · Software Engineering Explore Intern · Product-Focused 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, Data Structures, Algorithm Design, Software Engineering Principles

SKILLS

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

Technologies: Git, React, Next.js, Flask, FastAPI, Docker, PostgreSQL, MongoDB, AWS, Azure, GitHub Actions

EXPERIENCE

Walnote AI

July 2025 – Present

Toronto, ON

Founding Engineer

- Built and shipped **full-stack** product features using **Python**, **FastAPI**, and React, working closely with teammates to design, implement, and iterate on user-facing functionality.
- Implemented **backend APIs** and data pipelines backed by **PostgreSQL** and **Redis**, focusing on reliability, performance, and clear monitoring.
- Used **Git**, code reviews, and CI/CD to collaborate effectively and maintain code quality in a fast-paced startup environment.

FTC Robotics

Sept 2022 – June 2025

Toronto, ON

Senior Software Lead

- Led a student **software team** to design and ship robot features **end-to-end**, from gathering requirements with hardware teammates to testing and iteration.
- Engineered **telemetry pipelines** in **C++/Java** to aggregate encoder, IMU, and camera data into a unified robot state for reliable autonomous behavior.
- Implemented **PID control** and tuning routines, improving autonomous navigation accuracy by 70% through iterative testing and debugging.

PROJECTS

HomeLab | Linux, Docker, Nginx, Cloudflare

May 2025 – Present

- Built a personal **Linux server** secured with SSH key-pair authentication and HTTPS reverse proxying using **Nginx** for secure access.
- Deployed **Dockerized** Node.js applications with PM2 and Cloudflare DNS/routing, gaining experience with home-lab infrastructure and deployment.

Spotilike | Flask, Next.js, TensorFlow

June 2025

- Built an **AI-powered** music discovery web app that matches songs to user emotions, integrating **Flask** backend, **Next.js** frontend, and **Spotify API**.
- Worked with a small team to design **UI**, implement features, and test the product, focusing on clear user flows and fast feedback.

Lofied | Python, torchaudio, Docker

May 2025

- Developed a **Python** tool that converts Spotify playlists into lo-fi tracks using **DSP** and audio processing, then packaged it in **Docker** for easy reuse.
- Won Best Solo Hack

Top 6 Overall at JamHacks 2025, demonstrating ownership from idea to working prototype.

Claim Brain | Flask, LangChain, MongoDB

Jan 2024

- Implemented an **AI study assistant** that supports file uploads, note summarization, and personalized study guides using **Python**, **GPT-4**, and **MongoDB**.
- Placed 4th at Hack the Valley 8 among 80 teams, showcasing rapid prototyping and collaboration with teammates.