

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

Founding Engineer

Toronto, ON

- Shipped **10+** full-stack features using **Python**, **FastAPI**, and React, reducing user onboarding flow time by **30%** and increasing weekly active sessions by **~25%**.
- Designed and optimized **backend APIs** and data pipelines on **PostgreSQL** and **Redis**, cutting p95 request latency by **40%** and eliminating multiple production timeouts.
- Improved release reliability by **introducing CI/CD** with **GitHub Actions** and code review checklists, driving a noticeable drop in post-release bug reports from teammates.

FTC Robotics

Sept 2022 – June 2025

Senior Software Lead

Toronto, ON

- Led a **5-person software team** to design and ship robot features **end-to-end**, contributing to top-**5%** regional rankings and multiple playoff appearances.
- Engineered **telemetry pipelines** in **C++/Java** to fuse encoder, IMU, and camera data, increasing autonomous path reliability by **~20%** across competition matches.
- Implemented and tuned **PID control** loops that improved autonomous navigation accuracy by **70%**, cutting overshoot and oscillation in field tests.

PROJECTS

HomeLab | *Linux, Docker, Nginx, Cloudflare*

May 2025 – Present

- Deployed and maintained a personal **Linux server** running **3+** self-hosted services, achieving **>99%** uptime over several months with HTTPS via **Nginx**.
- Containerized Node.js apps with **Docker** and PM2, simplifying updates so new versions ship in minutes instead of hours while keeping downtime near zero.

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** used by **50+** test users.
- Improved recommendation click-through during user testing by **~30%** after iterating on UI flows and emotion-detection thresholds.

Lofied | *Python, torchaudio, Docker*

May 2025

- Developed a **Python** tool that converts Spotify playlists into lo-fi tracks using **DSP** and audio processing, processing **dozens** of tracks per run with a fully automated pipeline.
- Won Best Solo Hack
Top 6 Overall out of **200+** hackers at JamHacks 2025, demonstrating end-to-end ownership from idea to working prototype.

Flaim 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**, cutting manual study-note prep time by **~50%** in user trials.
- Placed 4th at Hack the Valley 8 among **80** teams, validating usability and technical depth through judges' feedback.