

Yi-Chen Lin

Vancouver, BC, Canada | Canadian Citizen | TN status available for qualifying U.S. roles
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PROFESSIONAL SUMMARY

AI-focused Software Engineer graduating **May 2027** (BASc Electrical Engineering, UBC). Builds end-to-end **LLM applications** — **RAG** pipelines, **LangChain/LangGraph** agent orchestration, and **FastAPI** services. Delivered an **Android** field tool for **Delta Controls** over an 8-month industry capstone; **100+ GitHub stars** on personal open-source projects.

EDUCATION

University of British Columbia, Vancouver, BC

Expected May 2027

BASc, Electrical Engineering

Dean's Honour List (2022-2025)

Coursework: Data Structures & Algorithms, Software Construction, Machine Learning, Computer Architecture, Control Systems

TECHNICAL SKILLS

Languages: Python, Kotlin, TypeScript, JavaScript, Java, C, SQL

AI & LLM Systems: RAG, LangChain, LangGraph, MCP, agent workflows, tool calling, OpenAI API, prompt engineering

ML & Deep Learning: PyTorch, scikit-learn, NumPy, pandas, CNNs, RNN/LSTM, Transformers, seq2seq

Backend & Data: FastAPI, PostgreSQL, pgvector, ChromaDB, MySQL, JWT auth, async workflows, row-level locking

Tools & Infra: Git/GitHub, GitHub Actions (CI/CD), Docker & Compose, pytest, JUnit, Gradle, Linux

SOFTWARE ENGINEERING EXPERIENCE

Software Developer, Delta Controls — UBC ECE Industry Capstone, Vancouver, BC

Jan 2026 - Aug 2026

- Shipped a **Kotlin/Jetpack Compose** Android field app that cut on-site HVAC balancing time by **35%**.
- Fit a physics-derived indoor-temperature model via **L2-regularized regression** on cleaned telemetry at **0.3 °C MAE**.
- Built the **BLE** pipeline streaming temperature, humidity, and pressure from field probes into live charts.
- Designed the system prompts and **tool-call routing** for the app's **OpenAI API** voice assistant, with rule-based fallback.

TECHNICAL PROJECTS

Production RAG System — Python, FastAPI, bge-base, BM25, pgvector

Self-Managed

Jan 2026 - Mar 2026

- Built scalable RAG ingestion; indexed **20K vectors** in 15.5 s, cutting vector-search P95 27.5 ms → **1.76 ms**.
- Implemented bge-base/BM25 hybrid retrieval with RRF; lifted recall **6.0%** and NDCG **9.5%** at 323.6 ms end-to-end P95.
- Added TTL query-rewrite caching, dropping repeated rewrites from **3.3 s** and **465 tokens** to 0 ms and 0 tokens.

Media Content Operations Platform — LangGraph, FastAPI, MySQL

Client Project

Apr 2026 - Jun 2026

- Designed multi-branch **LangGraph workflows** with MySQL checkpointing, resuming across **3 paths** without state loss.
- Engineered a **5-stage FastAPI** orchestration service with row-level locking to prevent conflicting agent runs.
- Integrated **3 Coze agents** and publishing APIs, routing topic, copy, and delivery tasks to specialized agent calls.

YC Builds — GitHub Projects & Open-Source Work

Self-Managed | Ongoing

- Built AI-agent, macOS productivity, and UI tools across public projects, with **100+ cumulative GitHub stars**.
- Turned recurring daily friction into focused products including **Orbit**, **NoType**, and **ShareMemory**.

OTHER EXPERIENCE

AI Technical Content Engineer, AI Warts (AI media & education startup), Remote

Jun 2026 - Present

- Contribute the Chinese social-media crawlers (Xiaohongshu, Douyin) to **AI News Radar**, a **1.7K-star** open-source project.
- Rank crawled items by keyword extraction, recency decay, and engagement signals to surface trending AI news.
- Benchmark AI models, products, and developer tools released by **20+ partner companies**.
- Deliver written technical evaluations and hands-on walkthroughs of AI tooling and agent workflows.

Junior Electrical Assistant, Joychime Industrial Corporation, New Taipei, Taiwan

May 2024 - Aug 2024

- Supported electrical assembly, wiring, and plant inspection; cut paperwork volume **30%** with cleaner templates.

ADDITIONAL

Other Projects: Self-Balancing Robot — Arduino, PID control, sensor feedback, Bluetooth tuning (2025)

Technical Writing: Co-authored AI explainers reaching **311K cumulative reads**, with a **45K-read** top post

Languages: English, Mandarin (native)