

Braden Wei

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Education

McGill University

May 2027

B.Sc. Computer Science and Statistics

- **Coursework:** Software Systems, Operating Systems, Data Structures, Statistics, Probability, Algebra, Honors Calculus

Experience

Valsoft Corporation

Montreal, QC

AI Engineer Intern

June 2025 – Present

- Developed an **AI chatbot (RAG)** for portfolio company American Data, an Electronic Health Record provider. Enabled clinicians and staff to run natural language queries over complex healthcare datasets, **reducing resolution time from several days of manual workflows to seconds** and significantly improving clinical efficiency.
- Built an MVP using **Cohere/LangChain** with a **Next.js/React** frontend. **Integrated the assistant into the legacy Java EHR system** by architecting a secure API exchange layer, including a **read-only connector** for real-time clinical data access, designed with **RESTful APIs**, **Pydantic validation**, and **strict security controls** (CORS, rate-limiting).
- **Architected a HIPAA-compliant backend and database layer** using **Supabase (PostgreSQL)**, Redis caching, and batch embedding workflows. Supported high-volume queries with **95%+ accuracy** across **1,000+ test sessions**.
- **Designed evaluation and monitoring workflows** for the LLM, including **prompt tuning**, **retrieval benchmarking**, and **load testing**. Implemented observability with **Langfuse**, achieving **sub-3 second response times** and consistently **95%+ query accuracy** in production.
- Authored a comprehensive [Notion user guide](#), streamlining onboarding and accelerating adoption across clinical teams by **reducing training time by 50%**.

Awards & Projects

Instagram Business Order Automation Tool

[project link](#)

- Developed an automation system to **streamline order processing** for Instagram businesses by identifying orders in messages and generating receipts for each order. Built with **Typescript/React** frontend and **Python** backend for API calling and server management
- Utilized **OpenAI API** for AI-powered order extraction/receipt generation and **React Flow** for a visual workflow automation interface.
- Deployed the full-stack application on **Vercel** for customers.

Roomiez

Nov 2024 - Present

- Designed and developed a **cross-platform mobile app** using **React Native** and **Expo** to help university students find compatible roommates more efficiently.
- Built backend services with **Express.js** and integrated **Firebase Realtime Database** for seamless, real-time data sync between users.
- Implemented **Firebase Authentication** to securely manage user sign-up, login, and session state across platforms (iOS and Android).

Hack McGill

May 2024 - Present

- Developed and managed the budget for **McGill University's largest hackathon**, ensuring efficient financial planning and resource allocation for an event with over **600+** participants
- Coordinated event logistics, including managing catering services, securing sponsorships, and organizing merchandise distribution
- Negotiated with leading tech companies such as **Bell, Amazon, and Telus**, crafting tailored sponsorship packages and securing contracts, contributing to over **\$550,000** in sponsorships since the event

Technologies

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

Technologies: Next.js, Node.js, React.js, React Native, Pytorch/Tensorflow, Express.js, Django, Flask, Angular, Unix/Linux, Vercel, Render, PostgreSQL, Supabase