

# Braden Wei

✉ zunyue.wei@mail.mcgill.ca    ☎ 289-400-5824    🔗 bradenwei.github.io    in bradenwei    📍 Toronto/Montreal

## Education

### McGill University

B.Sc. Computer Science and Statistics

Expected 2026

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

## Experience

### Roomiez

Software Engineer

Montréal, QC

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).

### McGill AI Society

Software Engineer

Montréal, QC

Jan 2024 - Apr 2024

- Built a custom library to preprocess image datasets, integrate feature extraction pipelines, and implement **multi-label classification using convolutional neural networks (CNNs)**. Deployed the model via an API for real-time recommendations, incorporating scalability and modularity for future development
- Developed a clothing recommendation system as part of the program, leveraging **PyTorch and TensorFlow** for model development and training. Utilized **computer vision** to classify clothing styles and recommend personalized outfit combinations to users

## Awards & Projects

### Instagram Business Order Automation

[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 **ChatGPT API** for AI-powered order extraction and **React Flow** for a visual workflow automation interface.

### MediSign

- Engineered a real-time sign language interpreter using **Mediapipe and TensorFlow**, utilizing holistic tracking to capture facial, body, and hand landmarks for accurate gesture recognition
- Developed a **LSTM neural network** for action classification, achieving **95% accuracy** in detecting medical sign languages and translating them to English, based on a dataset of **30 sequences per action**

### 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

### Euclid Math Contest

- Scored in the **top 7%** among 15000+ contestants in 2021
- Placed top 25% in 2021, 2022 and 2023

## Technologies

**Languages:** Java, Python, TypeScript, SQL, JavaScript, C++, C

**Technologies:** Node.js, React.js, React Native, Pytorch/Tensorflow, Express.js, Django, Angular, Unix/Linux