

# Raymond Liu

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## Education

### McGill University

BEng, Software Engineering Co-op | CGPA: 3.7/4

Computer Organization, Algorithms and Data Structures, Operating Systems, Model Based Programming

Montreal, QC

August 2022 – May 2026

## Industry Experience

### Intern in Technology and Innovation

Solutions Will – MS Power Platform, TypeScript, Salesforce

Montreal, QC

May 2023 – August 2023

- Conceptualized and implemented the enterprise's **business process automation** plan
- Corresponded with Salesforce clients and translated needs into systems requirement documents
- Developed **custom connectors** for **MS Power Platform**, reducing future development time by **50%**
- Programmed automations in **TypeScript** and **MS Power Platform**, boosting business process productivity by up to **100%**

## Projects

### FindMyGrind

Rust, Axum, Hyper, SQLx, PostgreSQL, Svelte

April 2024 - Present

- Conceptualized novel service to aggregate coffee beans and crowdsource brew parameters
- Leveraged **tokio** to design a **multithreaded REST API** with **PostgreSQL** pool resulting in efficient and scalable backend
- Collaborated with industry partners to design public API to simplify **data aggregation** and community use

### Sports Center Manager

Java, SpringBoot, Hibernate, PostgreSQL, Svelte

January 2024 – April 2024

- Architected domain model to match client requirements and extend with additional functionality
- Designed and built over **30 REST endpoints** integrated with **PostgreSQL**
- Directed UX design of **responsive cross platform** frontend, leveraging **SSR** to reduce user side load time by **50%**
- Implemented basic **CI/CD pipeline** using **Github workflows** and **actions**

### AssetPlus

Java, JavaFX, Gherkin, Cucumber, Umple, Figma

August 2023 – December 2023

- Utilized model-based programming to generate **5000 lines of code**, reducing manual man hours by **75%**
- Led UX design of GUI, producing standardized components with team, reducing design hours by **50%**
- Authored extensive **Gherkin** scenarios to perform automated behavioral testing of model using **Cucumber**
- Performed peer-review of behavioral tests, identifying issues and proposing solutions with original authors

### BrickPi3 Robot

Python, BrickPi3

August 2023 – December 2023

- Led development of software using **OOP** to reduce size of codebase by **40%** relative to average
- Achieved a **50%** reduction in task completion time relative to project specifications through the use of **concurrent programming** and **algorithm optimization**
- Managed **systems integration** between hardware and software teams, leading to a **20%** reduction in budget utilization

### Othello & Algorithm Analysis

Python, Tkinter, Pandas

May 2022

- Created Othello game logic using **OOP** concepts and front end using **Tkinter**
- Implemented Minimax and Alpha-Beta gameplay algorithms for computer player
- Performed **quantitative analysis** of performance of algorithms using **Pandas**

## Technical Skills

- Tools: C, Java, JS & TS, Python, Rust, Svelte, SQL
- Frameworks: SpringBoot, Hibernate, Axum, SQLx
- Spoken Languages: English (Native), French (C2/C1), Mandarin (Spoken)