# JERRY LIU

liuzirui.work@gmail.com
(647) 336 - 7843
asiantempura.github.io/abtme
Toronto, ON

## EDUCATION

### B.S. in Computer Science

Carleton University — April 2023

## PROGRAMMING SKILLS

**Languages:**

- C/C++
- C#
- Java
- Python
- SQL
- JQuery
- HTML
- ASP.NET
- Javascript

**Programs:**

- SAS
- Node.js
- Power Apps
- Mongoose
- MongoDB
- SharePoint
- Microsoft Excel
- Power BI

## LEADERSHIP EXPERIENCE

### VICE PRESIDENT

Carleton Computer Science Society — September 2020 - April 2021

- Acted as the liaison between the School of Computer Science and 2000+ computer science students
- Encouraged student participation and promoted engagement to improve the quality of life for computer science students by hosting and promoting social events
- Facilitated internal discussions and supported by creating promotional materials, organizing, and hosting events with 40+ attendees
- Helped organize hackathons and technical talks to enrich student experience and broaden pathways

## WORK EXPERIENCE

### Data Analyst

Bank of Montreal — September 2022 - April 2023
SAS, Power Apps, SharePoint, SDLC, SQL, MS Excel, Power BI

- Simulated and analyzed financial data from 200+ billion records to create a simulated control group
  - Applied control group data to gain insight and improve product approval decision making
- Created an incident form using VBA macros to automate cashback exception reports for more streamlined process
- Refactored and reorganized directories containing data and projects to improve file storage and internal access

## PROJECTS

### Nine Men's Morris AI

**Python** — February 2022 - April 2022

- Used OOP to create a playable game with responsive UI
- Implemented an AI through the use of adversial search and min-max game trees
- AI has demonstrated the ability to make intelligent plays and win against non-optimal strategies

### Webots Maze Navigation

**Java** — November 2021 - December 2021

- Simulated a robot able to navigate a complex maze and safely deliver parcels through the implementation of inverse kinematics and path planning
- Robot able to map out obstacles using LIDAR and calculate the best path using Dijkstra's Algorithm

### Webots Maze Navigation

**Java** — November 2021 - December 2021

- Managed task division and meeting schedules for a group of programmers
- Proposed and implemented the use of Visitor, Factory and Observer designs using UML diagrams to accurately reflect relationships between student, professors and courses
- Applied CSS and HTML to enhance the UI of the website, making it more appealing to users