

# JERRY LIU

## CONTACT

- ☎ (647) 336-7843
- ✉ liuzirui.work@gmail.com
- 🌐 <https://asiantempura.github.io/abtme>
- 📍 Toronto, ON

## EDUCATION

### Bachelor of Computer Science Major Minor in Statistics

Carleton University 2019-2023

- Fundamentals of Web Applications
- Object-Oriented Software Engineering
- Introduction to Artificial Intelligence
- Database Management Systems
- Introduction to Robotics

## 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

## CAREER GOALS

### Short Term

- Obtain certification in AWS and MS Azure
- Develop proficiency React and Angular

### Long Term

- Build meaningful connections with coworkers and expand professional network
- Acquire transferable skills that could be useful in the future
- Narrow field of interest and become an expert in the field

## WORK EXPERIENCE

### Data Analyst

Bank of Montreal 2022-2023

- 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

### Math and English Teacher

Kumon North America 2018-2019

- Directed communication and sales between parents to promote efficient transactions and proper workload distribution
- Supervised and guided children through their education by establishing a mutual relationship and motivating them

## LEADERSHIP

### Vice President

Carleton Computer Science Society 2020-2021

- 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

## PROJECTS

### Nine Men's Morris AI

Python 2022-2022

- Used OOP to create a playable game with responsive UI
- Implemented an AI through the use of adversarial 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 2021-2022

- 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

### Course Management System

C#, HTML, Node.js, ASP.NET 2021-2021

- 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

### Glad-AI-tors

Python, Pygame 2020-2020

- Designed a competitive AI for an arena-style game involving avoiding obstacles and attacking other AIs
- AI was able to change tactics depending on different scenarios
- AI was able to defeat over 75% of other competitive AI programs

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