





JERRY LIU

CONTACT

-  (647) 336-7843
-  liuzirui.work@gmail.com
-  <https://asiantempura.github.io/abtme>
-  Toronto, Ontario

EDUCATION

Bachelor of Computer Science

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++
- Java
- Python
- SQL
- HTML
- CSS
- Javascript

Programs

- SAS
- Node.js
- Unity
- Gamemaker2
- Mongoose
- MongoDB
- Microsoft Excel
- Power BI

CAREER GOALS

Short Term

- Improve work-life balance
- Learn about new technologies through experience
- Practice managing salary and living costs

Long Term

- Build meaningful connections with coworkers and expand my professional network
- Acquire transferrable skills that could be useful in the future
- Narrow my 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