

Charley Liu

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EDUCATION

University of Ottawa

Bachelor of Science in Computer Science (CO-OP)

Ottawa, ON

Sep. 2022 - Dec. 2026

- **GPA:** 10.0/10.0
- **Programming Coursework:** Python & Java

Centennial C.V.I

Ontario High School Diploma

Guelph, ON

Sep. 2018 - Jun. 2022

- Grade 12 Average: 94%

PROJECTS

Personal Website: www.charleyliu.ca (for additional projects)

Expense Tracker | *HTML, CSS, Javascript, ReactJS, JSON, Netlify*

Nov. 2022 - Feb. 2022

- Created a simple CRUD web application using the **React** JavaScript library
- Utilized json-server and localStorage to store expense data
- Deployed the web application on **Netlify** using a **Github** repository
- Implemented efficient navigation among various pages using the **React** Router Library

Maze Solver | *HTML Canvas, CSS, JavaScript, Git, Github Pages, Algorithms*

Nov. 2022 - Jan. 2022

- Created a web application that allows users to build, generate, and solve mazes
- Implemented various pathfinding and maze generation **algorithms**
- Utilized **HTML Canvas** to display and update the maze
- Deployed and tested the web application on **Github Pages**

Symphony Bot | *JavaScript, Node.js, Git, PaaS, Heroku, Discord API*

Nov. 2021 - Feb. 2022

- Designed and programmed a Discord music bot using **Javascript** and **Node.js** modules
- Maintained the application's source code using Github and **Git** version control
- Integrated Support for playing youtube audio using npm modules
- Successfully deployed and tested the application on **Heroku**

Minesweeper | *Java, Swing & AWT*

Jan. 2021 - Feb. 2021

- Programmed a clone of Minesweeper that can be played on any machine with Java installed
- Designed a simple GUI and game interface using the **swing** and **AWT** java packages
- Added the ability to customize games with a set number of rows, columns, and mines

LEADERSHIP

Computer Science Club Executive

Sep. 2021 - Jun. 2022

Centennial C.V.I

Guelph, ON

- Coordinated & hosted weekly events with other club executives
- Created & published online resources for club members regarding data structures & algorithms
- Helped foster a community of high students with interests in Computer Science

AWARDS

Waterloo CEMC CCC Distinction Award

Feb. 2022

Canadian Computing Competition Senior Division

Guelph, ON

- Competed in a national programming competition with **3,256** high school students
- Implemented various **data structures and algorithms** in order to solve unique problems in Computing
- Completed the competition with a score in the **top 25%** of all students

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, HTML, CSS, Arduino, RobotC

Frameworks: Node.js

Developer Tools: VS Code, Git CLI, Netbeans, Pycharm, Heroku, Github, Github Desktop