Charley Liu

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EDUCATION

University of Ottawa   Ottawa, ON
Bachelor of Science in Computer Science (CO-OP)   *Sep. 2022 - Dec. 2026*
- GPA: 10.0/10.0

Centennial C.V.I   Guelph, ON
Ontario High School Diploma   *Sep. 2018 - Jun. 2022*
- Grade 12 Average: 94%

PROJECTS

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 visualization **algorithms**
- Utilized **HTML Canvas** to display and update the maze
- Deployed and tested the web application on **Github Pages**

Penguin Info-Page | *HTML, CSS, Javascript, Git, Github Pages*   Oct. 2022
- Designed an informational website from the ground-up using **HTML**, **CSS**, and **Javascript**
- Utilized CSS media queries to make the website responsive for various device sizes
- Deployed and tested the one-page website 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, Netbeans*   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