

Charley Liu

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EDUCATION

Bachelor of Science in Computer Science (CO-OP)

Sep. 2022 – Dec. 2026

University of Ottawa

Ottawa, ON

- **GPA:** 4.0/4.0
- **Relevant Courses:** Python, Java, C++, Computer Architecture, Software Engineering, Data Structures & Algorithms, Databases, Programming Paradigms

TECHNICAL SKILLS

Languages: Java, Python, Javascript, Ruby, C++, Arduino, JSON, XML

Web Technologies: HTML, CSS, Javascript, React, Rails, Bootstrap

Developer Tools: Git, Github, Bash, Android Studio, Firebase, VS Code

EXPERIENCE

Full Stack Developer

May 2023 – Present

University of Ottawa – CEED

Remote

- Maintained & implemented requested features for a **Rails** web app within a small team
- Utilized **HTML** forms and Rails controllers to create and update data within a **PostgreSQL** database
- Communicated with managers and supervisors on a weekly basis to **document various requirements**
- Followed & maintained **industry standards** with **Agile** workflows, CI/CD, and staging/test servers

PROJECTS

Medihub 🐙 | *Java, Android Studio, Firebase, XML*

Oct. 2023 – Dec. 2023

- Created a mobile **healthcare management system** that manages appointments between doctors and patients
- Modelled **UML** class diagrams in each sprint & implemented them into the app & database
- Integrated **Firebase Authentication & Realtime Database** into the app to simplify and speed up development
- Collaborated with 3 team members on a Github repository using **Git branching & code review**

P2P File Share 🐙 | *HTML, CSS, Javascript, React*

Mar. 2023

- Created a web application that lets users share files on their browsers using **WebRTC P2P** connections
- Implemented room-based connections with **generatable URLs** that can be shared with ease
- Collaborated with 2 team members to conceptualize and complete the project in a short span of **36 hours**
- Added **automatic code deployments** by integrating Github Actions & Netlify into the project

Maze Solver 🐙 | *HTML, CSS, Javascript*

Nov. 2022 – Jan. 2022

- Built a web application that allows users to generate, customize, and solve their own mazes
- Implemented various **pathfinding** and **maze generation** algorithms using **Javascript**
- Utilized **HTML Canvas** to display and render changes to the maze

LEADERSHIP

Computer Science Club Executive

Sep. 2021 – Jun. 2022

Centennial C.V.I

Guelph, ON

- **Organized & hosted** weekly events with other club executives
- **Recorded & published** online Data Structures & Algorithms resources for club members
- 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
- Utilized various **Data Structures & Algorithms** in order to solve unique problems in Computing
- Completed the competition with a score in the **top 25%** of students