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:** 3.97/4.0

EXPERIENCE

IT & Platform Support Co-op Student　　　　　　　　　　　　　　　May 2024 – Aug 2024
National Research Council Canada　　　　　　　　　　　　　　　　　　*Ottawa, ON*
- Transformed raw project timeline data into actionable insights with **Power BI**, creating clear and readable reports
- Enhanced user experience in **Power Apps** by optimizing large tables, improving query speeds by up to **250%**
- Built & deployed custom workflow extensions in **C#** for **Dynamics 365**, enhancing functionality and integration
- Facilitated Agile development with **Azure DevOps**, crafting detailed user stories, and managing code repositories

Full Stack Developer　　　　　　　　　　　　　　　　　　　　　　May 2023 – Apr 2024
University of Ottawa – CEED　　　　　　　　　　　　　　　　　　　　*Ottawa, ON*
- Developed & maintained features for a web app as part of a collaborative team, ensuring timely & efficient delivery
- Converted complex **database analytics** into actionable reports for business users, improving **data accessibility**
- Established accurate handling of **calendar event time blocks** across different time zones, enhancing **reliability**
- Adhered to industry best practices for **testing**, **CI/CD**, and **server management** across separate environments

PROJECTS

MechForum | *Next.js, React, Typescript, Tailwind, Prisma, AWS*　　　　　　May 2024 - Present
- Created a web application that allows users to **document & share** their custom mechanical keyboard builds
- Ensured safe & secure **password storage** by utilizing **Slow Hashing** algorithms, preventing brute-force attacks
- Optimized image quality, storage, and **cost efficiency** by utilizing **AWS S3** bucket storage for images & videos
- Established countermeasures for DDoS and spam attacks by integrating **CAPTCHA solutions** & **rate limiting**

Medihub | *Java, Android Studio, Firebase, XML*　　　　　　　　　　　Oct. 2023 – Dec. 2023
- Developed a mobile **healthcare management system** that manages appointments between doctors and patients
- Gathered project requirements & modelled **UML diagrams**, ensuring proper migration into the database schema
- **Spearheaded development** by integrating **Firebase Authentication** & **Database** into our local environment
- Worked with a team of 3 with GitHub, utilizing code review to ensure high-quality, collaborative development

P2P File Share | *HTML, CSS, Javascript, React*　　　　　　　　　　　　　　　Mar. 2023
- Designed a web application that lets users share files on their browsers using **Peer-to-Peer** connections
- Implemented **room-based connections** with unique 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**
- Streamlined the development workflow by integrating **GitHub Actions** for **automated code deployments**

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

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, HTML, CSS, Javascript, Ruby, Arduino, DAX, FetchXML
Frameworks: React, Node.js, Ruby on Rails, Next.js, JUnit
Developer Tools: Git, AWS, Android Studio, Azure, Firebase, Vercel, Github Actions, VSCode