

Andy Liu

andy-liuu | andyliu3160

Education

University of Waterloo and Wilfrid Laurier University

CANDIDATE FOR HONOURS COMPUTER SCIENCE AND BUSINESS ADMINISTRATION (DOUBLE DEGREE)

Waterloo, Ontario

September 2021 - August 2026

- **GPA: 3.98** (95.17%)
- **Awards:** President's Scholarship of Distinction (\$2000)

Skills

Languages TypeScript/JavaScript, Python, C/C++, Java, Racket
Technologies Node.js, React.js, Express.js, MongoDB, Figma, Postman, \LaTeX

Experience

Software Developer Intern

Toronto, Ontario

ORBISEED TECHNOLOGY INC.

May 2022 - August 2022

- Implemented and maintained backend **REST API** endpoints in **Express.js**, ensuring high quality code using **Inversion of Control** principles, **unit tests** spanning **80%+** coverage, and **integration tests** on all new endpoints
- Initiated action to improve team-wide processes, including: standardizing integration tests on **Postman** and adopting feature flag variables
- Demoed **2** major feature releases made with **React.js** during sprint review meetings, receiving acclaim from upper management for excellent communication ability
- Developed product features and solved critical bugs as an **Agile** software engineer, resulting in a **12%** increase in story points delivered

Junior Software Developer

Windsor, Ontario

THE FIRST PROTOTYPE

July 2021 - September 2021

- Automated spreadsheet maintenance and data access using **JavaScript/Google Apps Scripts** to perform auto-triggered actions and handle Google Forms inputs, resulting in a **25%** increase in efficiency
- Developed and contributed to company websites, including: drafting design specifications with lead designer using **Figma**, ensuring mobile responsiveness using **Bootstrap**, and coordinating with managers to publicize contributions

Private Math Tutor

Windsor, Ontario

SELF-EMPLOYED

October 2018 - June 2021

- Increased grades of students by an average of **20%** by delivering personalized math lessons and academic mentoring sessions
- Enriched students' understanding of the Ontario high school math curriculum over **50+** sessions, increasing students' confidence in writing CEMC math contests

Projects

Staple Studio Startups (Winner of Staples Studio Challenge)

Hack the Six 2022

MONGODB, EXPRESS.JS, REACT.JS, NODE.JS

August 2022

- Developed an entrepreneurial solution for a Staples-sponsored challenge, involving a **MERN stack** web app designed to accelerate startup growth
- Implemented an interactive frontend interface using **React.js** and **MaterialUI** that displays statistical trends and collects user feedback on startups
- Completed a backend server using **Express.js** and **Node.js** which aggregates and analyzes database entries while using **REST API** endpoints to send and receive data
- Programmed efficient document-schemas for a **MongoDB** database, using **Mongoose** to facilitate interactions with the backend server

Dropcase: Broadening Horizons (Co-Winner of Dropbase Technical Case Challenge)

TheGoldenHack 3.0

PYTHON, FIGMA, PANDAS, HTML, CSS

October 2021

- Developed a financial solution for a case study on **Dropbase**, involving a token system based on financial predictions made using **Pandas**
- Presented a graphical solution made using **Figma** that would yield an average profit margin of **50%**

QuaranTravel

MasseyHacks VII

PYTHON, PYGAME

May 2021

- Developed a GUI using **Python** and **Pygame** that displays real-time pandemic and travel-related information, on an interactive world map with support for **16** countries