Andy **Liu**

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Education

University of Waterloo and Wilfrid Laurier University   *Waterloo, Ontario*
Candidate for Honours Computer Science and Business Administration (Double Degree)   *Sep. 2021 - Aug. 2026*
- **GPA: 3.98** (95.6%)

Skills

Languages	Python, JavaScript, C, Java, HTML, CSS, Racket
Technologies	Node.js, React.js, Express.js, Bootstrap
Misc	Microsoft Office Suite, LaTeX

Experience

The First Prototype   *Windsor, Ontario*
Junior Software Developer   *July 2021 - Sept. 2021*
- Developed and contributed to 2 open source websites by managing layout to ensure mobile responsiveness using **Bootstrap.**
- Coded API endpoints in **JavaScript** via Google Apps Scripts to access and maintain spreadsheet information dynamically, resulting in more efficient, automated spreadsheet manipulation.

Vincent Massey Science Olympiad   *Windsor, Ontario*
Club Leader   *Sept. 2019 - June 2021*
- Conceptualized, implemented, and directed weekly science experiments and educational games for **45+ members**, teaching students the fundamentals of various STEM fields.
- Initiated transition of Science Olympiad to virtual environment by collaborating with school administration and on-boarding co-executives, resulting in a **30%** increase in membership.
- Mentored winning teams of University of Guelph Science Olympics competition, as well as winning mathematics challenge against 35 teams.

Self-Employed   *Windsor, Ontario*
Math Tutor   *Oct. 2018 - June 2021*
- Increased grades of students by an average of **25%** by delivering personalized math lessons and academic mentoring sessions.
- Enriched students' understanding of Ontario high school math curriculum and increased students' confidence in writing CEMC math contests.

Projects

QuaranTravel   *MasseyHacks VII*
Python, Pygame   *May 2021*
- Developed an interactive GUI using **Python** that displays real-time pandemic and travel related information based on country.
- Updated information upon user request using various **API** and web scraping libraries.

Financial Calculator Prototype   *Waterloo, Ontario*
React.js, Express.js, MySQL, HTML, CSS   *Dec. 2021*
- Completed **front-end development** of a website using **React.js** to manage personal budgets and give financial advice.
- Used **Express.js** to create API endpoints that accessed financial data from **SQL** databases, increasing accuracy of financial calculations.

Dropcase: Broadening Horizons (WINNER)   *TheGoldenHack 3.0*
Python, Figma, Pandas, HTML, CSS   *Oct. 2021*
- Developed a financial solution for a case study on **Dropbase**, involving a token system based on a financial prediction made using **Pandas**
- Presented a graphic model made using **Figma** that would yield an average profit margin of **50%**

Space Dungeons   *Windsor, Ontario*
Java, Swing   *July 2020*
- Created a video game using **Java Swing** for the GUI, practicing object oriented programming techniques to reduce code size.

Honors & Awards

2021	**President's Scholarship of Distinction ($2,000) ,** Entrance scholarship awarded for **> 95% average**	*Waterloo, Ontario*
2020	**S.W. Ontario Gr.12 Silver Award,** Awarded for excellence on Canadian Open Mathematics Challenge	*Windsor, Ontario*