

ALBERT LAY

Web Developer

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Technical Skills

Languages | JavaScript, TypeScript, Python*, C*, Bash, HTML, CSS
Technologies | React, Git, Jest, Sass, Figma

* indicates past experience

Relevant Experience

International Hub | Web Developer

July 2021 - present

Tools: React (Bootstrap & Styleguidist), Sass, Jest, ESLint

- Led the development of the redesigned website to serve **1600+ community members**.
- Transformed designs into **reusable, modular, and well-documented** components.

UW MathSoc | Web Developer

Jan 2021 - Apr 2021

Tools: WordPress, Avada

- Enlisted to develop the MathSoc Cartoons page in collaboration with their coordinator, which houses **18 comics** created over 3 terms.
- Updated website with events targeted to **8,000+ students** in the Faculty of Mathematics.

Projects

Personal Website 🔗

Tools: React, Sass, Jest, Figma, AWS Amplify, Google Analytics

- Responsive portfolio website showcasing **seven projects** with a custom-designed interface.
- Followed best practices to achieve a Lighthouse score of **100% in SEO and accessibility**.

Unbeatable Tic-Tac-Toe 🐙 🔗

Tools: TypeScript, Sass, Jest, Webpack, ESLint, JSDoc

- Web-based tic-tac-toe equipped with three modes, including an unbeatable AI utilizing **Newell** and Simon's algorithm and tested under **1 million automated randomized plays**.
- Applied **object-oriented principles** to build classes with well-defined methods.
- Employed unit and integrations tests to achieve **93% line coverage**.

Stats Made Easy 🐙

Tools: Python, Tkinter, NumPy, SciPy, Matplotlib

- Graphical native application to help students calculate the probability of random events.
- Implemented support for the **normal, binomial, and Poisson distributions**; including a graphing feature for normal distributions.

Education

University of Waterloo | GPA 3.9/4.0

2020 - 2025 (expected)

Candidate for B.Sc, Honours Computer Science

- 1 of 20 recipients of Computer Science International Upper-Year Scholarship (\$3000, Jul 2021).
- University of Waterloo President's Scholarship of Distinction (\$2000, Apr 2020).