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).