# ${f William}$ Liu

Canadian Citizen (J-1, TN, H-1B Visa Eligible)

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#### **EDUCATION**

Honors Computer Science (HBsc.), Honors Business Administration (HBA) Sep 2022 – Present Western University / Ivey Business School

London, ON

- **GPA**: 3.93/4.00 (91.4%)
- Scholarships/Awards: Dean's Honor List, Andrew & Sarah Hamilton Scholarship (\$6600)
- Relevant Courses: Data Structures and Algorithms, Software Tools and Systems Programming, Computer Organization and Architecture, Applied Logic for Computer Science, Discrete Structures for Computing

## TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, Java, HTML, CSS, SQL, Rust, C, C#

Frameworks/Libraries: React, Next.js, Node.js, Express.js, Flask, TailwindCSS, pandas, SQLAlchemy

Technologies: Git, MongoDB, Unix, Linux, Docker, PostgreSQL, GraphQL, Jira, Figma, AWS

## Experience

#### Software Developer Intern

May 2023 – Aug 2023

Streamforge

Remote

- Built a data pipeline using Node is and Selenium to automate the aggregation of social media statistics capable of generating hundreds of aggregated views per minute using concurrent asynchronous requests
- Created dashboards using Node.js to automate the retrieval of publishing data for upcoming indie game releases to produce over 800 potential sales leads for sales team
- Facilitated advertising campaigns resulting in over 70 thousand clickthroughs for the marketing of major video game titles such as Remnant II and Sea of Stars

**UX** Intern Nov 2022 – Apr 2023

Cafezia Coffee

London, ON

- Decreased user bounce rate by 7% for company's online storefront by implementing redesigns to the user interface of the store landing page that targeted key user pain points
- Boosted website traffic through improvements to search engine optimization practices based on analysis of website

#### Projects

**Anishelf** | TypeScript, Next.js, Flask, PostgreSQL

- Built a full-stack web application using Next.js, Flask, and PostgreSQL to generate exportable vocabulary flashcard decks based on vocabulary from anime series
- Reduced API endpoint response time by 24 seconds per call by optimizing SQL queries for table holding dictionary data with over 200 thousand rows
- Utilized Docker containers running on a VPS with nginx to deploy and publish the web application

# YACHIP-8 Emulator | Rust, SDL2

- Developed a CHIP-8 emulator using Rust to emulate CHIP-8 system architecture
- Implemented a CPU including the CPU instruction set, registers, and memory management and a front end to display graphics using SDL2

#### Wealthsimple Product Review

• Built and presented a new product feature to current Wealthsimple product manager that improves the onboarding of first-time investors as one of 29 fellows for the Western Product Society Fellowship

# Leadership

May 2023 - Present Design Lead Hack Western London, ON

• Led a team of four to design UI/UX for the web presence of one of Canada's largest hackathons