# William Liu

647-513-8803 | liu.wllm@gmail.com | linkedin.com/in/liuwllm | github.com/liuwllm | liuwllm.me

## **EDUCATION**

## **University of Western Ontario**

Honors in Computer Science and Honors in Business Administration (HBsc. + HBA)

**GPA**: 3.8/4.0

**Graduation Date:** May 2027

- Awards: Dean's Honor List, Western Scholarship of Excellence (\$8000), Andrew & Sarah Hamilton Scholarship (\$6600)
- Relevant Coursework: Data Structures & Algorithms, Linear Algebra, Software Tools & Systems Programming, Computer Organization & Architecture

### WORK EXPERIENCE

# Meta & Major League Hacking

Jun 2025 - Sep 2025

Production Engineer Fellow

Remote

- Reduced deployment time of Flask app by 41% by optimizing Docker containers using layer caching and automating deployment process with GitHub Actions and Bash
- Increased test coverage of web application to 96% via the implementation of additional unit and integration tests

# **Trojan Technologies**

May 2025 – Aug 2025

Data Engineer Intern

London, ON

- Achieved 27% increase in end-to-end migration of legacy data tables to Snowflake by building automated data ingestion and transformation workflows using Python and Airflow DAGs
- Decreased redundant data volume by 38% by standardizing and cleaning raw JSON data using SQL and regex-based parsing
- Increased coverage of backfilling processes for Airflow DAGs by 53% to improve overall data completeness through the recovery of missing historical data caused by data ingestion failures
- Built a Jenkins CI/CD pipeline with Docker and Bash to automatically deploy Airflow DAG changes to production server

Streamforge May 2023 – Aug 2023

Software Engineer Intern

Montreal, QC

- Enabled 100+ aggregated data results per minute to increase available Twitter data for creator outreach purposes by developing an ETL pipeline using Node.js and Selenium
- Generated 800+ potential sales leads to support targeted client outreach by building automated dashboards using Node.js to retrieve publishing data from APIs on upcoming indie game releases
- Drove over 70,000 clickthroughs by facilitating advertising campaigns for major video game titles such as Remnant II

#### LEADERSHIP

# Lead Web Developer

May 2023 - Present

Hack Western

London, ON

- Spearheaded the development of the web presence for one of Canada's largest collegiate hackathons serving 1400+ applicants
- · Developed React-based draggable canvas and interactive elements animated using CSS for hackathon promotional website

#### **PROJECTS**

Anishelf | TypeScript, Next.js, Flask, PostgreSQL, GraphQL, Docker, nginx

- Developed a full-stack web application using Next.js and Flask to automatically generate exportable vocabulary flashcard decks for foreign languages based on subtitles extracted from animated series
- Deployed app using Docker containers on a DigitalOcean VPS, utilizing nginx as a reverse proxy to manage traffic

#### **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

#### TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Java, Rust, C++, Bash, HTML, CSS

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

Tools: Git, Linux, Docker, MongoDB, PostgreSQL, GraphQL, AWS, Snowflake, Apache Airflow, DigitalOcean, nginx