# Ben Asokanthan

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## **EDUCATION**

#### Western University

Sept 2020 — Oct 2025

BSc - Specialization in Computer Science with Science Internship Program

London, ON

- 87%, GPA: 3.7/4.0 | Dean's Honor List 2021 2024
- Courses: Data Structures & Algorithms, Systems Programming, Discrete Structures, Graphics, Object-Oriented Design, OS, Databases, Machine Learning, Artificial Intelligence II, Parallel & Distributed Computing
- Clubs: Co-President for Power to Change Western, Web Lead for Hack Western, VP Design for Western AI

# WORK EXPERIENCE

# Backend Software Engineer

May 2024 — September 2024

Hypercare

Hybrid/Toronto, ON (Internship)

- Developed AWS Lambda function for generating excel reports using TypeScript, and fixed message report generation feature
  on client and admin React.js web apps
- Modified GraphQL query to only fetch necessary data on schedule screen on client app. This improved average page load time from 30s to 0.6s, decreased backend load, and eliminated frequent timeouts experienced by SickKids

## Software Developer

May 2023 — April 2024

Cognition+

Hybrid/London, ON (Internship)

- Developed the custom Word document generation feature in the insurance app (Angular, Java Spring), saving insurance provider clients hundreds of hours spent creating administrative insurance letters and documentation
- Pushed for a wider adoption of code formatters/linters (Google Java Format and eslint) and stricter TypeScript rules,
   significantly improving developer experience, code quality, and code reviews while removing future bugs

# Software Engineer

January 2023 — April 2023

Project Jupyter & RBC (MLH Fellowship)

Remote (Internship)

- Implemented custom Git image diff viewer feature for the JupyterLab IDE using React, giving 1 million+ developer and data scientists the ability to see image changes in their repositories
- Built UI and Python REST endpoints for the stash feature for the Git extension, and wrote Playwright integration tests and Python unit tests, improving test coverage for the whole project by 8%

Web Lead

May 2024 — December 2024

Hack Western

London, ON (Volunteer)

- Led a team of 6 web developer organizers in building web projects for promoting/organizing Hack Western
- Developed an auto-saving hacker application form using Next.js, TypeScript, PostgreSQL, and tRPC, enabling over 1500
  hackers to tell their hackathon stories concurrently

#### **PROJECTS**

### Western Rank (<a href="https://westernrank.com">https://westernrank.com</a>)

June 2023 — August 2023

- Led a team of 5 to design and develop a full-stack application for UWO students to review and explore courses
- Implemented the review prompt and explore courses page, helping thousands of UWO students find their next course

#### TypeHero (https://typehero.dev)

July 2023 — August 2023

- Optimized all Prisma database queries in the TypeScript learning app, improving latency by 48%
- Built the custom challenge and solution comment system with React Query and Next.js Server Actions

## CHIP-8 Emulator (https://github.com/basokant/chip-8-emulator)

January 2022 — April 2022

- Developed an easy to use, configurable emulator for the CHIP-8 system with 4 other computer science students
- Implemented binary processor instruction decoding for all 32 CPU instructions of the CHIP-8 specification

#### SKILLS

- Programming Languages: JavaScript/TypeScript, HTML/CSS, Python, Java, Go, C, C++, SQL, MongoDB
- Technologies: React, Next, Svelte, Java Spring, Express.js, Flask
- Libraries: Jest, Playwright, THREE.js, React Query, SDL, pandas, NumPy, Matplotlib, scikit-learn, TensorFlow, PyTorch