

Gareth Lau

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EDUCATION

Western University, London, ON, Canada

2018 - 2023

Bachelor of Applied Science, Software Engineering – GPA: 94%

Bachelor of Arts, Honors Business Administration (HBA) – GPA: 81%

TECHNOLOGIES

TypeScript, Go, Python, Cypher, Java, PHP, React, MongoDB, Neo4j, Docker, Linux/Bash

EXPERIENCE

floatingfile, Founder & Developer

September 2019 – Present

- Built a file transfer application using Express and React that has facilitated 13000+ file transfers since January 2020 and has totalled 1000+ unique users.
- Doubled upload speed by using AWS S3 signed URLs to upload files directly from the client.
- Architected a server push backend using server-sent events for a shared, real-time experience.

Shomigo, Lead Developer – Toronto, Ontario

February 2020 – Present

- Designed Neo4j database schema to support recommendations for a set of over 1 million items.
- Implemented client-side caching and optimistic updates to reduce load times by 15%.

Datadog, Software Engineering Intern – New York City, New York

May – Aug 2022

- Designed and implemented a new Go gRPC service to enhance GCP load balancer metrics.
- Removed rate limit bottlenecks by implementing paginated cache which reduced API calls by 4x.
- Diagnosed and fixed high memory usage and leaks with pprof and Datadog profiler.

Condos.ca, Full Stack Developer Intern – Toronto, Ontario (Remote).

May – Aug 2021

- Increased outgoing calls from agents to leads from 30 to 85 leads per hour by developing a power dialer on Condos.ca's proprietary client relationship management platform.
- Reduced uncategorized leads by 5% by building a form for agents to record call outcomes.

TELUS, Systems Analyst – Vancouver, British Columbia (Remote)

May – Aug 2020

- Implemented a map view for TELUS' internal workplace reservation software using OpenLayers, JavaScript, and Java Spring which eliminated third-party software costs.
- Reduced search time for users by 50% by developing APIs for filtering workstations.

Teksbotics, Software Engineering Intern – Hong Kong, SAR

May – Aug 2019

- Designed and implemented a multiple queue audio recording system in Python which improved responsiveness by enabling simultaneous speech-to-text processing and API requests.
- Developed a convolutional neural network in TensorFlow for keyword detection with 87% accuracy which reduced third-party API requests by over 95%.

EXTRACURRICULARS AND PROJECTS

Hack Western 7, Co-Director

March 2020 – March 2021

- Led a team of 13 to organize Western University's annual hackathon, hosted 600+ participants.

Hack Western 6, Organizer & Web Developer

March 2019 – March 2020

- Built the Hack Western 6 application portal and live site using Vue.js, Express, and MongoDB.

ALYN – Hack Western 5 Project Submission ([Most Potential to Propel](#))

- Built a posture tracking application using Google Cloud Vision and Electron.