

Bill Li

(647) 633-0471 | b382li@uwaterloo.ca | [bill-l1.github.io](https://github.com/bill-l1) | [linkedin.com/in/bill-l1](https://www.linkedin.com/in/bill-l1) | github.com/bill-l1

SUMMARY

- 2 years of startup internship experience in full-stack web development building scalable and highly performant web and mobile applications using React, Vue.js, Next.js, HTML, CSS, JavaScript, TypeScript, PHP, Python, Flask, Spring Boot, and PostgreSQL.
- Expertise in end-to-end web development, leading key enterprise software development projects for data visualization and data management, collaborating cross-functionally with non-technical teams to improve their workflows.
- Proven leadership capabilities managing and mentoring other interns, as well as co-founding a social media venture.
- 2 years of experience building, deploying, and maintaining SPAs, microservices and APIs for e-commerce, third-party integrations (e.g. CRMs), business development, workflow automation, content management, and IoT.
- Expert in data integration, data engineering, and application security, with experience shipping real-world products serving hundreds of users.
- Experience with machine learning, AI and computer graphics with relevant coursework and project experience using C++ and Python (Keras, PyTorch).

EDUCATION

University of Waterloo

Sept 2019 – Aug 2024

Bachelor of Computer Science (BCS), Minor in Cognitive Science

Waterloo, Ontario

- Relevant Courses: CS341 Algorithms, CS350 Operating Systems, CS346 Application Development, CS485 Machine Learning, CS486 Artificial Intelligence, CS484 Computational Vision, CS488 Computer Graphics

EXPERIENCE

Technical Consultant

Nov 2024 – Apr 2025

NiagaraCodes — React, Next.js, PostgreSQL

Niagara Falls, ON

- Developed software solutions for a **non-profit organization** coordinating social projects for the Niagara region.
- Built a board game catalog for charitable events (**100+ people**), currently serving the Diocese of St. Catharines.

Software Developer

Jan – Apr 2023

Cover Technologies — Vue.js, Vuex, Nuxt, Flask, Firebase, PostgreSQL

Los Angeles, CA, USA

- Built design tools for manipulating geometry and geospatial data and automate CAD generation, collaborating with architects to improve design throughput by **saving 100+ work hours per project**.
- Enhanced clarity and ease of use for a document management system, **reducing load times by up to 90%**.
- Refactored and documented improvements to scalability and maintenance for legacy backend systems.

Full-stack Developer

May – Aug 2022

Hypotenuse Labs — React, Next.js, Flask, PostgreSQL

Remote

- **Led a team** to build and launch a product microservice for luxury fashion brand Mostly Heard Rarely Seen.
- Implemented key features and integrated new products for an e-commerce NFT marketplace supporting **1000+ daily active users**.
- Improved accessibility and security by implementing an OAuth user authentication flow.

Full-stack Engineer

Jan – Apr 2021

Zamplo Research — React, React Native, React Native Web, Flask, PostgreSQL, Spring Boot

Remote

- Built a data visualization platform, **saving 30+ work hours per week** for sales and marketing teams.
- Built a service for database synchronization and CRM integration on an existing user database and REST API.
- Improved app reliability and productivity for the software team by creating a new provisioning platform.

Full-stack Developer

May – Aug 2020

eleven-x — Laravel, Vue.js

Waterloo, Ontario

- Built client-facing data visualization tools for an Internet of Things (IoT) analytics platform.
- Implemented automated unit testing and created scripts for performance monitoring.
- Built payload decoders for several parking sensors currently serving the University of British Columbia.

PROJECTS

System Design Prep Website | *React, Next.js, Flask, Ollama, DigitalOcean*

May 2025 – Present

🔗 *WIP*

- Building an e-learning and interviewing platform for software engineers.
- Customized a Mistral LLM language model using Ollama with prompt engineering to evaluate long-form answers for system design interviews, optimizing for grading accuracy and enabling cost-effective feedback generation.
- Built a web client for quizzes, payment and user authentication.

Resonance | *React Native, Django, PostgreSQL, Redis, nginx, DigitalOcean*

Nov 2024 – Feb 2025

🔗 *rsnc.social*

- Created a social media app for Web, iOS and Android to get personalized media recommendations from others.
- Built a mobile client and REST API for managing user interactions and sharing media lists.

CheatID | *React, Express, PostgreSQL, Redis, nginx, DigitalOcean*

June 2024 – Nov 2024

🔗 *demo.cheatid.com*

- Created a cybersecurity analytics platform for live service video game development, serving over **five million in-game events by real players** and detecting **40+ hackers**.
- Built a client for big data visualization and monitoring of player activity to help identify common vulnerabilities.
- Built a REST API for data analysis, serving aggregate data and performing anomaly detection.
- Improved response time and versatility by creating support for customizable player events with automatic indexing.

SKILLS

Languages: Python, C/C++, SQL (PostgreSQL), JavaScript, TypeScript, HTML/CSS, PHP, Kotlin, Java, R, Bash

Frameworks: React, Vue.js, Node.js, Express, Flask, Next.js, Nuxt.js, Laravel, Spring Boot, Ollama

Tools: Linux, Git, Docker, AWS, Azure, GCP, DigitalOcean, Redis, Firebase, Heroku, MongoDB, nginx, gunicorn

Libraries: Apache Spark, Hadoop, Celery, Kubernetes, PyTorch, TensorFlow, Keras, Three.js, WebGL, OpenGL, visx

Other: Microservices, Machine Learning, Agile, Scrum, JIRA, Data analysis, Project management, Relational databases (RDBMS), NoSQL, Frontend development, Backend development, Systems design, Product lifecycle, UI/UX design, Figma, Distributed systems, XML, JSON, REST/RESTful, SOAP, WSDL, ES6, SaaS, CI/CD, Cloud architecture