

Michael (He Yang) Li

<https://github.com/kayoMichael> • +1 (905) 616 8745 • <https://michael-li.vercel.app>

University of Waterloo

Bachelor of Mathematics, Computing Minor (Coop)

Waterloo, ON

September 2021 – April 2026

Technical Skills

- Python
- React/NextJS
- Javascript/Typescript
- ExpressJS/NodeJS
- Flask/FastAPI
- MySQL/SQLite/MongoDB
- Docker
- Prisma/Mongoose
- AWS

Experience

Musashi AI

May 2025 – Aug 2025

Full Stack Developer Intern

- Developed an AI-driven visual inspection system for vehicle components contributing to defect detection and quality assurance.
- Developed Serverless workflows to Fetch images from **AWS S3** and invoked AI models for visual inspections and analysis.
- Contributed to the development of the full-stack analytics application using **Vue.js**, **Typescript**, **Docker**, **Python** and **Fastapi** to visualize inspection results and system performance.
- Analyzed AI results to accurately output predictions, confidence levels, acceptance thresholds, and relevant metrics.

Ontario Ministry of Education

Sept 2024 – Dec 2024

Software Developer Intern

- Developed tools using **Python**, **HTML** and **CSS** to streamline the process of finding information of Common Vulnerabilities and Exposures (CVE) utilizing **Gemini AI** API and **NIST NVD** API.
- Identified important areas to be tested and Developed unit tests using **Nunit**, **.Net Core** and **C#** to ensure that the product was functioning as intended.
- Developed E2E Test automation scripts using **Selenium** for Various web applications of the Ministry of Education, ensuring the quality and reliability of the software products.

Projects

Market Place for AI Generated Image

- Developed a Full Stack Application to allow users to Share their own interesting Generative AI Images using **React**, **MongoDB**, **ExpressJS**, and **TypeScript**.
- Utilized **Docker** and **Github Actions** to create multi-staged Deployment for efficient manual testing in production environments.
- Setup Session based Authentication using **Redis** and **ExpressJS**. and protected private API endpoints.
- Integrated **OpenAI API** with strict rate limits to allow users to generate images on the platform.

Premier League Library

- Created a **Python** package to analyze transfers, team rankings, top player stats, and match statistics for the top 5 European leagues.
- Scraped over **19,000 advanced soccer statistics** and automated the initialization of a **SQLite** database for **machine learning** training upon package installation.
- Developed a **Flask API** Server and an **AWS Lambda/API Gateway application** to allow users to expose the library as an API.