KHOI NGUYEN

(437) · 225 · 7746 ◇ bob.k.nguyen@gmail.com ◇ linkedin.com/in/mnkhoi ◇ github.com/mnkhoi ◇ mnkhoi.com ◇ Canadian Citizen

EDUCATION

University of Toronto   *September 2021 – April 2026*
B.Sc. in Computer Science & Mathematics
GPA: 3.58/4.00
Relevant Courses: Software Design, Data Structures and Algorithms, Operating Systems, Parallel Programming, Introduction to Information Security, Scalable Computing, Computer Architecture

SKILLS

Computer Languages	Python, Java, C, C++, Golang, Ruby, SQL, Javascript/TypeScript, Shell, Bash
Frameworks and Technologies	Springboot, Express.js/Node.js, FastAPI, React, Flask, MySQL, PostgreSQL, SQLite, Docker, CUDA, Redis, AWS(S3, IoT Core, EC2, RDS, MSK), Linux/Unix
Tools	Git, perforce, jenkins, gdb, valgrind, gcc, Agile methodologies, Object-Oriented Programming

WORK EXPERIENCE

AMD (Advanced Micro Devices)   May 2024 - August 2025
Hardware Verification Infrastructure Intern   *Markham, ON*

· Improved 300% performance on LSF Monitor using **Go**, **Redis**, **Svelte/Sveltekit**, and **Ruby** for managing jobs running on IBM LSF used by 200+ team members.
· Designed, implemented, and published an internal paper for the 'Matrix' event-driven "AI" automation framework with a 10 person team in **Go**, **RabbitMQ** and **SQLite** to automate communication and debug for 100+ people teams.
· Assisted in running, and improving sanity and regression automated verification test system 27%, built using **Ruby**, **Python**, **C++** and running on **Jenkins** for AMD's biggest project ever.

Nexle Corporation   June 2022 - August 2022
Software Developer (Intern)   *Ho Chi Minh City, Vietnam*

· Programmed the front-end of a CMS for an EMEA client using **React** and **Redux**
· Designed and built the back-end, and APIs of a fitness app with 1,000+ users using **Node.js**, and **MySQL** maximizing efficiency and ease-of-use for front-end developers.
· Debugged 20+ old bugs, and bottlenecks on existing projects on both **React** front-end and **Express.js**, **Java Spring Boot** back-end, tested new code for bugs reducing the chance of application breaking bugs.

XtayPro Canada   July 2023 - June 2024
Software Developer   *Toronto, ON*

· Designed and deployed the XTayPro Canada website using **Next.js** and **Tailwind CSS** for app with 150+ users.
· Supported 10 person team by setting up GitHub, Trello, and hosting on Digital Ocean with Github Actions for CI/CD

PROJECTS

DynamoHub   May 2025 - August 2025
· Lead a team of 8 students to develop an AI traffic management platform for *UrbanDynamo*
· Designed a real time system using object-oriented programming from data ingestion through sensors and Jetson Nano through to **AWS** and **Flask** backend
· Built and tested the MVP of the edge compute unit (**Python**, **Docker**) with data ingestion through to AWS IoT Core
· Connected **Flask**, **SocketIO**, **AWS MSK (Kafka)**, and **PostgreSQL** backend for realtime updates