# KHOI NGUYEN

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#### **EDUCATION**

University of Toronto

September 2021 - April 2026

B.Sc. in Computer Science & Mathematics

Overall GPA: 3.58/4.00

 Relevant Courses: Software Design, Data Structures and Analysis, Operating Systems, Parallel Programming, Embedded Software, Introduction to Information Security, Software Tools and Systems Programming

#### **SKILLS**

Computer Languages Golang, Ruby, Python, SQL, Javascript/TypeScript, Java, C/C++, Shell, Bash

Frameworks and Technologies Node.js, FastAPI, Reack, Flask, MySQL, PostgreSQL, SQLite,

Docker, CUDA, AWS(S<sub>3</sub>, IoT Core, EC<sub>2</sub>, RDS, MSK),

Tools git, perforce, jenkins, gdb, valgrind, gcc, Agile methodologies

Professional Skills Adaptability, Problem-solving, Team Player, Accountable, Reliable, Self-starter

Languages English, Vietnamese

#### **WORK EXPERIENCE**

### Hardware Verification Intern Advanced Micro Devices (AMD)

May 2024 - August 2025

Markham, ON

- · Improved 200% performance on LSF Monitor using **Go**, **Svelte/Sveltekit**, and **Ruby** for managing jobs running on IBM Spectrum LSF used by 70+ team members.
- · Designed, implemented, and published the 'Matrix' event-driven automation framework with a team of 10 people in **Go**, and **SQLite3** to automate communication and action for debug for potentially 100+ people teams.
- · Proposed and built an MVP of an internal Jira Bug Tracking Service using Python/FastAPI backend and React frontend.

## Software Developer (Intern)

June 2022 - August 2022

Nexle Corporation

Ho Chi Minh City, Vietnam

- · Programmed the front-end of a content management system for the client using React and Redux
- · Designed and built the back-end, and APIs of a fitness app using Node.js, and MySQL maximizing efficiency and ease-of-use for front-end developers.
- · Debugged 20+ old bugs on existing projects on both **React** front-end and **Express.js** back-end, tested new code for bugs reducing the chance of application breaking bugs.

Software Developer XtayPro Canada

July 2023 - June 2024

Toronto, ON

· Designed and deployed the XTayPro Canada website using Next.js and Tailwind CSS for app with 150+ users.

· Supported a 10-person team by setting up GitHub, Trello, and cloud hosting

### **PROJECTS**

DynamoHub

May 2025 - August 2025

- · Lead a team of 8 students to develope a traffic management website for *UrbanDynamo*
- Designed a real time system 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
- · Fixed frontent bugs for DynamoHub built using React, Tanstack Query, and Tailwind
- · Connected Flask, SocketIO, AWS MSK (Kafka), and PostgreSQL backend for realtime updates