

Andrew Pham

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EDUCATION

University of Ottawa

Ottawa, ON

Honours Bachelor of Science in Computer Science

Sep. 2021 – Dec 2025 | CGPA 9.59/10 (3.8 GPA)

EXPERIENCE

Test Automation Co-op/Intern

Jan. 2024 – Present

Nokia

Ottawa, ON

- Developed a program to create, send and receive mock traffic, and collect metrics on Linux devices to test fixed networks, controlled via a REST API built with **Python** and **FastAPI**
- Added support for traffic generation in the app with various packet types and protocols, including Ethernet, IPv4, PPPoE, ARP and more
- Identified opportunities for better error handling and messaging for API endpoints and implemented them, improving the API's UX
- Created scripts for automated program installation on **Ubuntu**

Software Developer, Co-op

May 2023 – Sep. 2023

Recollective Inc.

Ottawa, ON

- Created a new internal tool for testing LLM Prompts in **Vue.js** and API endpoints in **Java/Spring** to make calls to a microservice
- Captured and logged request metadata and LangChain chain step results in a **FastAPI Python** microservice and forwarded results to AWS OpenSearch with Fluent
- Developed back-end site limit features and API endpoints with **Java/Spring** to support a new license type

Software Developer, Co-op

May 2022 – Sep. 2022

Recollective Inc.

Ottawa, ON

- Implemented new front-end features using **JSP**, **Vue.js**, **JavaScript**, **jQuery**, and **HTML/CSS**
- Reported, analyzed, and patched various software defects
- Developed new back-end features and API endpoints using **Java**, **Spring** and **MySQL**
- Completed various QA tasks including creation of test cases and end-to-end testing

PROJECTS

Sugar Shack Monitor | C, Node.js, Express.js

- Developed a **C** program for an ESP32 micro controller to detect when a sap barrel filled up using a capacitive moisture sensor, and sending a message to a local server using web sockets
- Created a **Node.js/Express** server to connect to the ESP32 via web sockets, allowing for the threshold to be updated, and notifying the user through text message using a GSM module or REST API calls when the threshold is exceeded

Globalization Index Analysis | Python, Jupyter, Scikit-Learn

- Analyzed the effects of globalization on financial markets using KOF's globalization index to measure levels of globalization and local stock market indices as proxies for their performance
- Wrote a report on findings, including evaluation of several machine learning models trained with **Scikit-Learn**
- Achieved an accuracy of 74% on a random forest binary classifier

E-Hotels | React, Node.js, Express, MySQL

- Developed a full-stack web app that allows customers to search and book hotel rooms, and employees to create and manage hotel chains
- Built a front-end using **React**, and a back-end in **Node.js/Express** using **MySQL** as a database

TECHNICAL SKILLS

Languages: Java, Python, JavaScript/TypeScript, SQL (MySQL), HTML/CSS, R

Frameworks: React, Vue.js, Node.js, FastAPI, Spring, Express

Developer Tools: Git, Docker, AWS, JIRA, GitHub, LangChain, Jupyter, VS Code, IntelliJ

Operating Systems: Ubuntu, macOS, Windows