# Andrew Pham

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#### EDUCATION

### University of Ottawa

Ottawa, ON

Honours Bachelor of Science in Computer Science

Sep. 2021 - Dec 2025 | GPA 9.59/10

#### Experience

#### Test Automation Co-op/Intern

Jan. 2024 – Present

Nokia

Ottawa, ON

- Developed a program to create PPPoE servers and clients, generate traffic, and collect metrics on Linux devices, controlled via a REST API built with **Python** and **FastAPI**
- Coded API endpoints for automated traffic generation with various packet types and protocols in **Python/FastAPI**, allowing for easy testing of fixed networks
- Identified opportunities for better error handling and messaging for API endpoints, and implemented them, improving the API's UX
- Created installation 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 new back-end site limit features and API endpoints with **Java/Spring** to support a new product 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

#### Globalization Index Analysis | Python, Jupyter, Scikit-Learn

Sep. 2023 – Dec. 2023

- 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

#### **<u>E-Hotels</u>** | React, Node.js, Express, MySQL

Jan. 2023 – Apr. 2023

- 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

#### Self-Hosted Websites | React, HTML/CSS, Nginx

Feb. 2024 - Present

• Built websites for family with React and self-hosted them on an Nginx server running on a Raspberry Pi

#### 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, Eclipse

Operating Systems: Ubuntu, macOS, Windows