TONY NGO

+1(519)-994-0170 | tngo07@uoguelph.ca | linkedin/tonyngoo | github/tonyngoo

EDUCATION

University of Guelph

Bachelor of Computing in Software Engineering, Minor in Business

• GPA: 4.0/4.0 | Dean's Honours List for all terms

Guelph, ON

TECHNICAL SKILLS

Languages: Python, Java, Javascript, SQL, HTML, CSS, PHP, C, SPARQL

Libraries & Frameworks: Node.js, React, Vue.js, Angular, Azure, Flask, PostgreSQL, Ragas, Langchain, LlamaIndex Developer Tools: Git, Docker, Confluence, JIRA, JTMF, Azure OpenAI, Streamlit, Matplotlib, Pandas, Bash, Jenkins

EXPERIENCE

Royal Bank of Canada (RBC)

January 2024 - Present

Graduation Date: April 2025

Software Developer Intern

Toronto, ON

- Enhanced LLM prompts that perform legacy code explanations, using **Azure OpenAI**, Python and Langchain to reduce the token usage by **32**% and latency by **14**%, driving cost savings of over **\$100,000**
- Developed proof of concept retrieval-augmented generation (RAG) scripts to run legacy code explanations, utilizing **Python** with **ChromaDB** for vector storage and **Langchain** for the retrieval algorithm
- Spearheaded the comparative analysis between RAG and the existing In-Context Learning (ICL) techniques when performing legacy code explanations, resulting in the team's **100**% pivot to the In-Context Learning technique
- Standardized prompt evaluation by integrating **PromptFoo** (a framework to evaluate LLM responses) into the workflow of **100+** developers, increasing productivity by **95%** with simplified benchmarking on prompt changes

TD Bank May 2023 – August 2023

Quality Engineer Intern

Toronto, ON

- Designed and implemented test cases using **Java**, Selenium, and Gherkin to validate user stories that perform business banking, contributing to the delivery of high-quality software for **1,000,000+** clients
- Led the consolidation and revamping of **392** test cases, improving the test automation speed on **Jenkins** by **12%**, ensuring faster feedback loops and expedited release cycles
- Conducted testing of **429** test cases, using **Cucumber** within a behaviour-driven development process to verify their alignment with the UI, adherence to **JIRA** user stories, and compliance with **JTMF** standards
- Streamlined and enhanced the test case routing and execution flow of **253** test cases, resulting in a **19%** improvement in test speed and performance when running Cucumber and Maven

Schema App

September 2022 – December 2022

Software Developer Intern

Guelph, ON

- Coded an account reactivation page that processes transactions with Stripe payment gateway integration, validates billing address information, and encrypts data using **Vue.js**, **Javascript**, PHP, and **Python**
- Increased client satisfaction by 14% through continuous UI enhancements and test coverage improvements made to the client tools and company website using Vue.js, Javascript, PHP, Jest, and PHPUnit
- Installed data protection, error handling and logging to PHP database interactions, improving code security by 12%
- Crafted new **Vue.js** components and optimized existing ones, using techniques such as code splitting, caching and lazy loading to improve code re-usability, rendering, and page-load performance by **18**%
- Led cross-functional collaboration with the Marketing & Sales teams to write 6 **SPARQL** queries, helping Customer Success Manager's drive success by simplifying the monitoring of Schema performance for **100**+ clients

PROJECTS

My Fitness Planner ☑ | Javascript, Vue.js, Node.js, Supabase, Tailwind

- Created a full-stack application where users can plan their workouts, with login authentication using Supabase
- **SVG Parser** 🗹 | C, Javascript, Express.js, Node.js, AJAX, HTML, CSS, Bootstrap
 - Developed an SVG file manipulation tool that enables users to upload, select, and edit SVG files, either to add shapes, or to select, scale and view individual elements within the image

COVID-19 Data Analyzer Python, Tkinter, Matplotlib

• Contributed in the development and **Scrum Leading** of a **Python** data processing and analysis system that extracts **10.000+** entries from Ontario's COVID-19 database to facilitate a deeper understanding of the pandemic's impact