

Education

BSc Computer Science, York University

September 2020 - expected December 2024

- **Courses:** Advanced Object-Oriented Programming (Java), Computer Organization, Introduction to Database Systems, Fundamentals of Data Structure, Operating System Fundamentals, Software Design

Skills

- Programming Languages: **Java, JavaScript, C, Python**
- Frameworks/Tools: **HTML, CSS, SQL, JSON, React, Spring, Flask, Git**

Projects

Mail Server

March 2024 – April 2024

- Built a multi-client mail server using **Java sockets** to support **SMTP** and **POP3** for email handling.
- Oversaw email storage and retrieval, ensuring 100% internal message handling without external relays.

RTSP Client

February 2024 – March 2024

- Developed an RTSP client to stream video using **UDP** and **TCP**, supporting MJPEG playback at 25 fps.
- Implemented three features: SETUP, PLAY, and PAUSE commands for smooth video playback.
- Controlled frame buffering for smooth playback and minimized disruptions from out-of-order frames.

Budgeting System Application

January 2023 – April 2023

- Designed a budgeting tool using **Java** and **JSON** to manage 100+ transactions across categories.
- Applied **Agile methodology** for faster updates, boosting user satisfaction and reducing issues.
- Collaborated closely with a team of 5, enhancing the tool's functionality and overall performance.

Hospital Management System

March 2022 – April 2022

- Developed a **Java-based** system managing 500 patients, 70 physicians, and staff for hospital operations.
- Applied **OOP** principles to manage multiple departments, improving patient care and workflows.

Research

Cybersecurity and Deep Packet Inspection (DPI) Anomaly Detection

September 2024 – Present

- Analyzing network traffic using **DPI tools** like **Suricata** to detect anomalies in real-time.
- Using **CNN** and **Beta-VAE models** to classify encrypted and unencrypted data for threat detection.

Volunteering Experiences

Canada Learning Code

September 2023 – Present

- Volunteering as a **mentor** at Canada Learning Code, aiding a program that's engaged 977,000 learners and delivered 11,000 educational **coding events**.
- Ensuring a positive learning environment for 4-5 learners by answering questions.

Work Experiences

Banana Republic, Toronto, Ontario

September 2023 – Present

- Providing outstanding customer service, contributing to a notable increase in store satisfaction.
- Drove a strategy that achieved over 90% customer registration for the reward program at cash register.

Browns, Toronto, Ontario

July 2022 – May 2023

- Operated as a cashier in the store to process customer transactions efficiently and accurately.
- Assisted customers in choosing suitable shoes, delivering excellent service with feedback over 80%.

Gap, Toronto, Ontario

September 2021 – December 2021

- Organized fitting rooms and hangers, enhancing the shopping experience for customers.
- Managed shipments to keep inventory above 20% with consistent monitoring and updates.