

EDUCATION

Specialized Honours, Bachelor of Computer Engineering

Sept 2021 - Present

York University

Expected April 2026

Relevant Courses: Advanced Object-Oriented Programming, Electric Circuits, Digital Logic Design, Introduction to Robotics, Data Structures and Machine Learning and Pattern Recognition.

Current **GPA 3.9/4.0**

EXPERIENCE

Application Engineering Intern - Black Berry

Jan 2024 - Apr 2024

- Led a research project to compare the real time performance of the QNX micro-kernel with the Ubuntu Monolithic kernel, analyzing computational performance in single threaded and multi-threaded scenarios
- Created detailed technical reports and presented findings to internal teams to highlight the core capabilities of QNX operating system, contributing to potential sales growth
- Led a team to implement real-time Monocular Visual Slam on a drivable robot with the Zed 2 camera with C++(Open CV), Python, and ROS 2 on QNX, showcasing the advance capabilities of the product

PROJECTS

Website Controlled Vehicle

April 2024 - Sept 2024

- Designed a web-based vehicle control system using **Next.js** and **Python** on a Raspberry Pi
- Implemented live camera feed using **OpenCV** on responsive web interface with movement buttons and a speed slider for smooth and accurate control.
- Utilized **Python** and **C++** to handle user input and motor control, showcasing expertise in **embedded systems** for real-time remote operations.

Robotic Arm

Oct 2022 - Dec 2022

- Developed a 3-axis robotic arm equipped with programming implemented in both **Java** and **C++**
- Engineered the robotic arm model within **Fusion 360** with a focus on achieving a lightweight and robust design
- Employed servo motors in conjunction with a micro-controller for arm manipulation and control

Security System

Mar 2022 - May 2022

- Developed a portable security system state machine by utilizing an Arduino micro-controller and programming it in **C++**
- Utilized an array of sensors to enable the system to detect incidents such as burglaries, fires, and carbon monoxide intrusions

SKILLS

Programming | Java • Python • C • Assembly • Verilog • C++ • Bash • ROS2 • R • Javascript

Technical Skills | Git • Linux • VSCode • Fusion 360 • Excel • Jira • R Studio • Selenium • Json

Soft Skills | Teamwork • Goal Oriented • Communication • Organization • Problem Solving

SCHOLARSHIPS AND AWARDS

York University Entrance Scholarship

Three scholarships based on academic merit (**\$10,000 total**)