# Razi Nameerah

**EDUCATION** 

## **University of Waterloo**

Candidate for Bachelor of Applied Science in Computer Engineering

Sept. 2021 - April 2026 Waterloo, ON

Jan. 2024 - Apr. 2024

• Cumulative GPA: 90.07

#### **SKILLS**

Languages: C/C++, Java, Python, JavaScript, HTML/CSS, PowerShell, ARM Assembly, VHDL

- Frameworks/Libraries: Selenium, ¡Query, ¡Unit, Robot Framework, Pytest
- Tools: Git, Perforce Helix Core, Kubectl, Lens, Jenkins, Visual Studio Code, Eclipse, STM32CubeIDE, Jira
- Hardware: STM32 Nucleo, Keil MCB1700, FPGA, Arduino

#### **EXPERIENCE**

# **Software Developer Intern**

Wind River Ottawa, ON

Developed a unified test runner capable of executing, consolidating, and reporting test results from both Pytest and Robot Framework, enhancing test execution efficiency and reporting capabilities.

- Designed and implemented a custom Pytest reporting tool to enable generation of test reports with step-bystep results, providing increased visibility into test execution flow and points of failure.
- Enhanced a Jenkins test automation pipeline by integrating Kubectl and Helm installations, and resolving critical Chrome installation bugs on Linux, ensuring functionality of the pipeline for UI and CLI tests.

#### Firmware Developer UW Orbital

Jan. 2024 - Present Waterloo, ON

- Implemented a driver to interface with a **LM75BD** temperature sensor over an I2C bus, along with a thermal management task responsible for periodic temperature measurement and telemetry transmission.
- Developed a logging module to ensure consistent handling of error codes and log messages across all software components, resulting in uniformed logging practices throughout the project.

# Software QA Specialist

*OpenText* 

Sept. 2022 - Dec. 2022

Richmond Hill, ON

- Developed a **PowerShell** tool to automate test environment setup/cleanup, including product deployment/configuration, for scheduled regression runs, thus improving test scenario reproducibility.
- Extended automation for cloud-based environment creation in VMware Lab using the VMware PowerCLI, to create/remove/modify vApps and VMs from the command line, boosting environment setup efficiency.
- Identified and updated 130+ outdated **Selenium** test cases written in **Java** following a major UI upgrade, resulting in enhanced test stability, increased use case coverage and accelerated QA testing.

#### **PROJECTS**

# Audio Morpher % | C

- Developed a multi-threaded audio processing system which uses the producer-consumer model for efficient audio task management and data exchange among multiple threads.
- Utilized **cURL** for managing HTTP requests/responses when fetching audio data from the **Freesound API**.
- Implemented functionalities including reversing, doubling, and halving the speed of audio data, before leveraging the **libsndfile** library for writing the processed audio results to WAV files.

## Roam Rover % | C++

- Designed a multi-functional **Arduino** robot car featuring both manual and automatic modes.
- Implemented automatic functionalities including line following and obstacle avoidance using infrared and ultrasonic sensors, enabling the robot car to effectively navigate paths and mazes.
- Created a joystick controller for manual operation, establishing communication via **nRF24L01** modules.

# **Book Vault** % | *Python, JavaScript, HTML, CSS*

- Developed a dynamic book tracker web application to assist users in managing their reading materials.
- Utilized **Python** and **Flask** for the backend interaction with the user's library, stored in an **SQLite** database.
- Leveraged the **Open Library Search API** to provide users with a wide collection of books to search for, add and categorize in their library.