

# Murtaza Hussaini

Ottawa, ON K2K 2R5 | 437-984-4050 | [imor.hu@gmail.com](mailto:imor.hu@gmail.com) | LinkedIn: [murtazahussainii](#) | GitHub: [murtazahussainii](#)

## SUMMARY

Recent Computer Engineering graduate from York University with 3 years of hands-on experience in embedded systems, real-time OS, and CI/CD automation across banking, telecom, and startup environments. Passionate about building robust, high-performance software for multi-core platforms. Seeking a New Grad Software Developer role at Ciena to contribute to innovative network solutions.

## HIGHLIGHTS OF SKILLS & QUALIFICATIONS

- **Languages & Frameworks:** Embedded System C, C++ (Boost, Qt), Python (Flask, pytest), Bash, Java
- **Embedded & Real-Time Systems:** VxWorks, FreeRTOS, Yocto, cross-compilation
- **Tools:** Git, Jenkins, Docker, Bitbucket, JIRA, GDB, GCC, Netconf, REST/HTTP, gRPC
- **Operating Systems:** Linux (Rocky, Ubuntu), Windows
- **Development Practices:** Agile, TDD, CI/CD pipelines, code reviews, unit/integration testing
- **Soft Skills:** Cross-functional collaboration, proactive debugging, adaptable under tight deadlines

## EDUCATION

### Bachelor of Engineering (B.Eng) in Computer Engineering

York University, Toronto, ON — April 2025

- **Relevant Courses:** Embedded Systems, Operating Systems, Digital Communication, Software Testing

## PROFESSIONAL EXPERIENCE

### Software Developer Co-op

RBC Bank — Toronto, ON

Jan 2022 – Dec 2022

Languages & Tools: C++ (Boost, STL), Python (pytest, pandas), Git, Jenkins, Docker, GDB, Linux

- Contributed to developing a **Linux-based account reconciliation microservice** in C++ that reduced processing time by **34%**, integrated over RabbitMQ and RESTful APIs.
- Automated CI pipelines via Jenkins to enable **daily deployment** and integrated Docker containers for sandbox testing, shortening QA cycle by **20%**.
- Wrote end-to-end test suites in Python using **pytest** to validate compliance features, achieving **92% coverage** on critical modules.
- Actively participated in **agile sprint reviews and code walkthroughs**, ensuring consistent implementation of secure coding standards.

### Junior Software QA & Tools Engineer

Redline Communications — Markham, ON

Jan 2023 – Apr 2023

- Developed embedded test scripts in C for wireless access point firmware, automating verification of RF signal stability under high loads.
- Used Yocto to modify and cross-compile image builds for custom hardware platforms, reducing bring-up time by 40%.
- Created internal dashboard tools in Python to visualize unit test results and debug logs using matplotlib and pandas.

- Identified and resolved a memory leak in a multithreaded radio driver module, improving uptime by 18% in QA lab benchmarks.

## Digital Experience Coordinator

**Designer Shoe Warehouse** — Toronto, ON

Jan 2023 – Apr 2023

- Updated the eCommerce website with new product launches, styles, and pricing; ensured accurate tagging, categories, and SEO-friendly descriptions
- Coordinated with buyers and content teams to upload seasonal collections and markdowns, supporting major promos like “Buy One, Get One 50% Off”
- Audited product pages to correct image placements, alt text, and brand naming inconsistencies, improving customer search experience by 25%
- Tracked site analytics and weekly sell-through to recommend priority placements on the homepage and category tiles

## UNIVERSITY PROJECTS

---

**Automated Vacuuming Intelligent Device (AVID) | C, GDB, GCC | [GitHub](#) | [Demo](#)** Feb 2024

- Programmed obstacle-avoidance logic in C using ultrasonic sensors; optimized response time to under 50 ms per object detection
- Used GDB and GCC on Linux to debug and cross-compile AVID's navigation code; reduced system crashes by 75% during field tests

**Sphere Movie | Java (Spring Boot), React, MongoDB, REST API | [GitHub](#) | [Demo](#)** May 2023

- Developed a full-stack movie trailer app with Spring Boot REST API and React frontend, enabling users to browse, search, and watch trailers
- Integrated MongoDB for movie metadata storage and implemented secure login with JWT; improved load time by 40% using lazy loading for thumbnails

## CERTIFICATIONS & AWARDS

---

- Linux Command Line & Shell Scripting – LinkedIn Learning (2023)
- Embedded Systems Programming in C – Coursera (University of Colorado) (2022)
- Python for Everybody – Coursera (University of Michigan) (2021)

## VOLUNTEER ACTIVITIES

---

**Refugee Learning Nest | Basic Computer Skills**

June 2015 - May 2016

- Taught refugee children aged 8–14 the fundamentals of using computers, including typing, file management, and internet safety
- Created and delivered weekly lessons using interactive tools like Scratch and Google Docs, boosting student engagement and confidence

## ADDITIONAL INFORMATION

- Open to relocation and hybrid work models
- Languages: English, Dari