

linkedin.com/in/hamnanimra · 647-303-6526 · hamnanimramirza@outlook.com

## EXPERIENCE

### Senior Software Integration Engineer – 5G RAN Flow Integrator

Ericsson · Ottawa, Canada · April 2025 – Present

- ▶ Support the verification of 5G RAN features by developing and contributing to automated test frameworks, contributing to feature stability and regression coverage.
- ▶ Troubleshoot test failures, analyze logs, and work with developers to ensure feature stability and regression coverage.
- ▶ Contribute to internal efficiency by helping build full-stack tools that streamline data workflows for various development teams.
- ▶ Assist in deploying applications CI/CD pipelines to support scalable development operations.
- ▶ Work with cross-functional teams to help troubleshoot integration issues and support prompt software deliveries.

(Baseband, Legacy Assurance, Automation, Scrum, Verification, Java, Python, React, Regression Testing, Telecom)

### HDL Software Integration Engineer and SME – Software Defined Vehicles

General Motors · Toronto, Canada (Remote) · January 2022 – August 2024

- ▶ Applied Python scripting to develop tooling that aided in improving system performance for automotive software.
- ▶ Contributed to projects enhancing over-the-air map data, supporting improvements in accuracy and coverage.
- ▶ Helped align team roadmaps with emerging technology trends in the automotive software space boosting user satisfaction in North America, China, and South Korea.

(Agile, Automation, Adaptive AUTOSAR, Python, MOTA, Canoe, Vector, CAN, Ethernet, SQL, Javascript)

### Software Engineer Intern – CUDA Compiler Compute Verification

Nvidia · Santa Clara, USA (Remote) · May 2021 – September 2021

- ▶ Supported compiler verification by writing cross-compilation validation checks, contributing to increase operational efficiency in 9.2M+ lines of code.
- ▶ Assisted in improving the team's development environment by containerizing compiler projects using Nvidia Docker, helping to standardize testing workflows.
- ▶ Contributed to performance analysis efforts, learning techniques for profiling and assessing compiler optimizations.

(CUDA, Compiler, Nvidia-Docker, FANNG, ML/AI, KPIs, Cross-platform Verification)

### Software Engineer Intern – Perflab Automotive

Nvidia · Toronto, Canada (Remote) · May 2020 – September 2020

- ▶ Contributed to the team's automation efforts by writing Python scripts to assist with performance testing, helping streamline automotive software validation.
- ▶ Conducted TensorRT inference benchmark testing sweeps to collect crucial data for future releases, enabling the creation of Automotive Marketing Tableau dashboards.
- ▶ Assisted with cross-functional team projects, collaborating with Perflab team and DriveIX team to aid joint-team data visualization efforts.

(Python, Deep Learning, Benchmarking, Embedded Systems, Nvidia Drive AGX, Drive OS, Data Visualization)

## Software Engineer Intern – Helix System Test Team

Wind River Systems · Ottawa, Canada · January 2020 – May 2020

- ▶ Applied Python-based test automation to assist in improving the testing process for a key virtualization platform.
- ▶ Built benchmark tools across multiple OS environments using Python, Bash, and PowerShell.
- ▶ Delivered KPI charts for performance analysis of the Helix virtualization platform.

( Python, Bash, PowerShell, KPI, VxWorks, Hypervisor, Virtualization, SDK

## Software Engineer Intern – ADAS System & Sensor

Blackberry QNX · Ottawa, Canada · August 2019 – December 2019

- ▶ Facilitated key interactions with QNX co-founder, advancing autonomous vehicle initiatives.
- ▶ Contributed to a smart city initiative by assisting in the development of tools for map data processing.
- ▶ Gained hands-on experience with embedded communication protocols like CAN bus on automotive hardware platforms.
- ▶ Supported projects involving V2X interfaces, learning about smart infrastructure communication.

( C++, Lidar, Radar, CoHda, Canbus, Renesas, V2X, APIs, OpenStreetMap

## QA & Testing Software Engineer Intern – Core OS Hypervisor Tech

Blackberry QNX · Ottawa, Canada · May 2019 – September 2019

- ▶ Used Python to help automate simple Jira workflows, supporting team efficiency.
- ▶ Participated in efforts to optimize system build images for better performance.
- ▶ Assisted with streamlining benchmark pipelines to help reduce testing cycle time.

( Python, QNX, Linux, QA, OS, Hypervisor, Networking (TCP/IP), Confluence, Build Systems

## EDUCATION

### B.Eng Software Engineering, Class of 2021

Carleton University

## SKILLS

**Technical:** Python, Java, C++, C# · Docker, Kubernetes, Git, SVN, Bitbucket, Linux, QNX, VxWorks, ROS, CI/CD, Bash, PowerShell, Adaptive AUTOSAR · REST APIs, NVCC, GCC, LLVM, Automation, Verification

**Non-Technical:** Photography, Videography, Motorsports, Agile, SDLC, Product Management

## **VOLUNTEERING**

---

### **University Intern Ambassador**

NVIDIA · 2019 – 2021

### **Student Intern Ambassador**

Blackberry QNX · 2019

### **Vice President External**

Systems & Comp Sys Society (SCESOC) · 2018 – 2019

### **Executive Marketing Director**

CUHacking · 2020

### **Head Delegate**

CUSEC · 2020

### **Prayer Service Volunteer**

Carleton University Muslim Student Assoc (CUMSA) · 2017 – 2019

### **Formula SAE Judge**