## Murtadha Nisyif

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Hiring Team Brock Solutions Kitchener, ON

Dear Hiring Team,

I am excited to apply for the Control Systems Engineer position at Brock Solutions. With solid foundation in software development and hands-on experience in designing and deploying integrated systems, I am confident in my ability to contribute to your team and help drive the continued success of Brock Solutions.

In my recent role as a Researcher ML Engineer at University of Guelph, I conducted in-depth data collection, diagnosis, and analysis to identify key correlations in latency and network bandwidth. This experience in real-time environments helped me develop a strong foundation for programming, deploying, and optimizing systems under various operational conditions.

My prior work as a Software Developer on an Assistive Robotic Feeding System in ROS2 required on-the-spot troubleshooting of hardware-software integration issues. Additionally, I worked on a Smart Door application, integrating microcontrollers and sensors (ESP32, PIR) to deliver a stable, automated experience. My experience as an IT Analyst further refined my problem-solving abilities by involving me in reading electrical schematics, configuring firewalls, and modernizing network infrastructure.

Beyond my professional roles, I actively explore industrial automation and embedded systems in my personal projects. I have self-educated in using the ESP32 to develop a low-cost, 32-bit PLC, programming it with OpenPLC to enhance my understanding of real-time control systems. Additionally, I manage a home lab where I automate lighting, thermostats, and security—deepening my experience in real-time data exchange, hardware integration, and troubleshooting. Throughout these projects, I have leveraged my expertise in C/C++, Python, Rust, and Java, along with Ladder Logic (PLC) knowledge, to integrate hardware and software in real-time systems. I also understand the importance of robust design documentation and functional specifications, having written and followed them closely for various edge-cloud and robotics solutions. My familiarity with IT/networking, databases, and version control (Git) further positions me to contribute effectively to Brock Solutions' industrial automation projects from design through commissioning.

I also welcome the travel requirement of up to 40% for on-site installations and system commissioning, as I thrive on hands-on involvement to ensure solutions run smoothly in real-world production. My background has prepared me to excel in roles that demand both technical depth and adaptability.

I am confident my experience, technical expertise, and proactive problem-solving approach make me a strong candidate for the Control Systems Engineer role and align with Brock Solutions's needs. I look forward to the opportunity to discuss how my background aligns with Brock Solutions's mission. Please feel free to contact me at mnisyif@gmail.com or +1 (519) 502-8463 at your earliest convenience.

Thank you for your time and consideration.

Sincerely,

Murtadha Nisyif