Nasif Alam

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EDUCATION

Bachelor of Engineering: Electrical Engineering Major

2013-2018

McGill University

Montréal, QC

SKILLS

Spoken Languages: English, French

Programming Languages: Java, C, C++. Python, MATLAB

Web Technologies: HTML, CSS, SQL, JavaScript

Tools: Wireshark, Github, Microsoft Office Products, Axosoft, Jira, Confluence, PowerApps, VMware

PROFESSIONAL EXPERIENCE

Mobile Telemetry Hardware Support Engineering Specialist (E.I.T)

March 2019-January 2020

Newtrax Technologies (Sandvik Acquired), Montreal, QC

- Provided level 1 and 2 technical support (IT, hardware, software) remotely to deployment specialists, field managers, and application specialists in various mining sites located in USA, South Africa, India etc
- Managed, built and deployed software-based configuration files according to a project scope to monitor health, utilization, and productivity CAN BUS data from large mining equipment (e.g scoops, trucks, loaders) as well as data from OEM devices (pressure sensors, inclinometers equipped on these large mining vehicles.
- Used Axosoft and JIRA in a LEAN environment to handle tickets in accordance to SLA and to ensure customer basic standards (CBS) were satisfied

Mobile Equipment Telemetry Protocol Analyst

October 2018-March 2019

Newtrax Technologies (Sandvik Acquired), Montreal, QC

- Performed reverse engineering (decryption) on various proprietary CAN signals (Sandvik, Caterpillar, Volvo, Atlas Copco, etc) utilizing internal applications and other computational methods
- Validated post-installation data acquisition from configured telemetry data loggers to perform quality assurance and to ensure optimal performance of deployed systems
- Conducted analysis on mining equipment electrical diagrams to confirm on-board sensors, ECUs, and CAN communication protocols (CDL, J1708, J1939)

Research Student/ Control Systems Lead

January 2017-December 2017

Supervisor: Andrew Kirk, McGill University, Montreal, QC

- Developed a microcontroller-based control system to control the thermocycling process of a novel gold-nanoparticle based surface plasmonic polymerase-chain reaction under an hour
- Implemented a PID controller in the Arduino IDE (written in C++) to control the heating and cooling of a resistive heating element in the circuit to simulate a single theromocycle of a PCR system
- Studied the performance of two implemented controllers: bang-bang controller and PID controllers on the ability to accurately handle the heating and cooling process

Java Software Tester

September 2014 to December 2014

McGill University, Montreal OC

- Implemented test cases in Java to assess the mechanical, software, and hardware components for a Lejos-NXT powered robot that can navigate around obstacles to find a box of a specific color and bring it to the proper destination
- Communicated the testing results to the manager and to members involved with the software development and mechanical design