



Embedded Software Developer for Mine Ventilation Automation -

Accutron Instruments Inc. - *Sudbury, ON, Canada.*

Accutron Instruments Inc., established in 1995, is an aggressive growing company in Sudbury Ontario. We are a high-tech company specializing in design and manufacture of advanced sensors and instrumentation that are changing the future of underground mine ventilation. We are building a strong technical team that pride themselves on superior execution.

Research and development is an important part of what we do at Accutron and we are always looking for talented people to join our team. If you enjoy working with the latest hardware/software technologies and wish to bring your ideas to life, you will enjoy a career at Accutron instruments Inc.

If this sounds like your thing, please send us your resume.

Responsibilities

- Develop, debug, and maintain embedded software in a repository-based environment.
- Contribute to product planning, and design.
- Analyzes design and determines coding, programming, and integration activities required based on general objectives and knowledge of overall architecture of product or solution.
- Writes and executes complete testing plans, protocols, and documentation for assigned portion of application; identifies and debugs, and creates solutions for issues with code and integration into application architecture
- Supports project team Leaders of other firmware engineers and internal and outsourced development partners to develop reliable, cost effective and high quality solutions for assigned systems portion or subsystem
- Collaborates and communicates with management, internal, and outsourced development partners regarding firmware design status, project progress, and issue resolution
- Represents the firmware engineering team for all phases of larger and more-complex development projects.
- Provides guidance and mentoring to less-experienced staff members.

Preferred Hardware Requirements

- Strong understanding of digital design concepts (logic gates, truth tables, etc...).
- Analog experience a must.
- Able to read and understand circuit schematics and diagrams.
- Hands On experience using oscilloscopes, logic analyzers and Digital Multi-Meters.
- Knowledge of printed circuit board design and ability to solder parts and wire and trace problems.
- Hands On experience with "bare metal" SPI, I2S, UART, Ethernet, WiFi, and Timers programming.
- Familiarity with STM32 family, a plus.

Preferred Requirements

- Hands-on experience with ucLinux (micro-controller Linux).
- Hands-on experience with resource-constrained embedded systems.
- Hands-on experience with C++ and strong knowledge of O-O concepts.
- Hands-on experience with gcc, g++, gdb, Makefile.
- Hands-on experience with RTOS/threaded async. applications.
- Hands-on experience with TCP/IP socket-level programming.
- Strong understanding of WebSockets, Web Canvas.
- Experience with SVN, a plus.
- Experience with Rowley CrossWorks, a plus.
- Experience with different mine ventilation systems and methods is advantageous
- Knowledge of industrial protocols in automation systems is advantageous (Such as RTU, Modbus, Ethernet, SQL, Profibus, Leakyfeeder, etc.)
- Experience and knowledge of different Industrial Electrical Systems is advantageous
- Experience with environmental monitoring sensors for gas and airflow is advantageous
- Advanced 3D designing and 3D printing skills is advantageous
- Advanced 2D designing skills is advantageous

Other Skills and Qualifications

BS in CS/CE or a related field coupled with demonstrated embedded projects you have worked on ALONE to completion (big plus)

Terms of employment

- Full time – days, evening and weekends
- Language: English

APPLY BY

E-mail: careers@accutroninstruments.com

Website: <http://accutroninstruments.com/>

About The Company

At **Accutron Instruments Inc.** we design, manufacture and commission a wide range of mining sensors to meet the demands of harsh industrial environmental conditions and infrastructure demand. Our products include airflow monitors, toxic gas detectors, temperature, pressure and humidity level sensors and complete Mine Air Quality Stations (MAQS).

We are committed to the continuous development of top-quality instrumentation for process automation solutions. We are driven by the work we do, creating global impact in the mining industry that leads to market advantages for our customers and a strong successful future for our company.

Accutron Instruments Inc. is a leading manufacturer of underground mine ventilation & automation technology founded in 1993. We are based in Sudbury, Ontario, Canada. We supply worldwide industrial markets with products and services for ventilation monitoring, process automation and optimization of mine ventilation systems to improve process efficiency and energy conservation.