

# ACCUTRON INSTRUMENTS EMPLOYMENT OPPORTUNITY



## EMBEDDED SOFTWARE DEVELOPER

For Mine Ventilation Automation - Accutron Instruments Inc. - Sudbury, ON, Canada.

A lot of other folks will put some nonsense about kittens, rainbows and unicorns here. We won't.

We are people that like to roll up their sleeves and get their hands dirty. If you work here we are going to drive you to be as successful as you can be. We are on a mission to expand our successful company.

Accutron Instruments Inc. is an aggressive growing company in Sudbury Ontario. We design and manufacture 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. If this sounds like your thing, please send us your resume.

## RESPONSIBILITIES

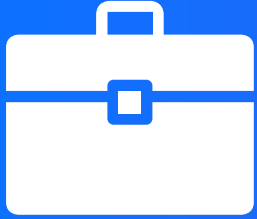
- Develop, debug, and maintain embedded software in a repository-based environment.
- Contribute to product planning, and design.
- Analyzes design and determines coding, programming, and integration activities required based on general objectives and knowledge of overall architecture of product or solution.
- 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.

## 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.

## 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.



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- 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 ALO-NE to completion (big plus)

## TERMS OF EMPLOYMENT

Full time – days, evening and weekends  
Language: English

## 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.

## APPLY BY

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