



POSITION: Senior Firmware Designer
REPORTS TO: Product Development and Engineering Manager
LOCATION: Ottawa, Ontario

Summary:

Established in 1982 and now a business unit within Stanley Black & Decker, Inc., Instantel is the global market leader in the design and production of vibration monitoring instrumentation. Our products are used in over 120 countries. Applications include civil engineering, construction, environmental, mining, mining exploration, quarry, underwater, structural health, human annoyance, military, and noise. We are currently designing a new suite of products applying cutting-edge wireless and cloud technologies to improve our customers' operational efficiency and expand our market.

The **Senior Firmware Designer** will play a critical part of the Product Development team.

Responsibilities:

- Collaborate with other designers and members of other elements of the company to design, develop, and test robust, and efficient firmware for instrumentation and data management and communication products.
- Assist with establishing and executing project development plans through accurate estimates of capabilities, risks, and effort.
- Assist in resolving escalated customer issues through root cause analysis and design updates.
- Collaborate with Engineering and Manufacturing on New Product Introduction (NPI).

Qualifications:

- A university degree in Software Engineering, Electrical Engineering or equivalent,
- A minimum of 8 years of experience in designing and developing complex embedded software for systems, with specific experience in several of:
 - Systems level architecture design, demonstrating collaboration with multi-faceted teams including Hardware and Software Designers.
 - Multitasking Real-time design and development using C. Experience developing using FreeRTOS is an asset.

- Use of various communication protocols between devices within a circuit, and external interfaces.
- Digital signal processing including advanced filtering techniques. Experience with MATLAB and/or Octave is an asset.
- IoT device operation and interfacing with reactive cloud systems.
- A rigorous and methodical approach to design, analysis, and testing,
- The skills to quickly understand product requirements and specifications and ability to contribute in the design of firmware architecture.
- The skills to document work thoroughly yet concisely, selecting and using suitable media for the purpose of effective communication and long-term product sustainment.
- The skills to communicate effectively with others, both as sender and receiver, and to build positive and productive working relationships, including using telepresence media.
- The judgment and integrity to provide reasonably accurate estimates and set achievable deadlines and performance objectives, and to report frankly on progress and setbacks.
- A willingness to adapt to evolving needs and means, demonstrating drive, maintaining passion for delivering high-quality work on time and exceeding expectations.

Stanley Black & Decker believes in giving applicants an equal opportunity to succeed on their own merit. We strive to hire employees that reflect and support the diverse perspectives, experiences and needs of employees and our communities. We remain committed to upholding the values of equity, diversity, and inclusion in our work environments. We know that diversity underpins excellence and that we all share responsibility for creating an equitable, diverse and inclusive organization. Therefore, in pursuit of our values, we seek employees who will work respectfully and constructively with differences across the organizational hierarchy in actualizing SBD's priorities, goals and principles of equity and inclusivity. If accommodation is required at any point in the recruitment process, please contact a member of our Recruitment Team. Please note that as part of our recruitment process, candidates in the final stages will be required to complete a background check which may include criminal background, credit and driver's abstract check.