



EMBEDDED SOFTWARE ENGINEER

Job Description

Icon Systems, Inc. (Icon) is a privately held San Diego company specializing in the design and manufacture of military-grade simulation, training and instrumentation products utilized by the Department of Defense.

RESPONSIBILITIES

- Embedded software development for Tactical Engagement Systems (TES).
- Primary work designing system software and programming embedded 16/32 bit microcontrollers.
- Job responsibilities includes working with a variety of interfaces to operator control panels, various I/O devices, serial communication, and specialized custom control devices and instrumentation.
- Working with manufacturing and hardware engineers to design test equipment and ATP (Acceptance Test Procedure) fixtures.
- Software configuration management and application of quality assurance methodologies will be incorporated to satisfy contract bid requirements.

REQUIREMENTS

- One to three (1-3) years of professional experience in the design, development and documentation of embedded software written in C, C++, and assembly languages using IDE (Integrated Development Environment).
- Experience with programming embedded systems and microcontrollers, including Freescale i.MX, Intel 80x86, TI MSP430, and Microchip PIC processors, from port I/O configurations, control register configurations, timer configurations, operating system designing/programming, all the way up to application program interfaces (API).
- Experience with programming boot loader for embedded microcontrollers.
- Knowledge of common serial communication protocols utilizing RS232/485, SPI, I²C, and USB.
- Ability to read electronic circuit schematics.
- Ability to work with hardware engineers to install, test and debug code for delivery of reliable turnkey product while applying software configuration management and validation rules.
- Ability to clearly structure code, organize routines, sanely manage control structures, variables and data while applying excellent discipline in change history practices, commenting and software organization.
- Self-motivated and a good team player.

EDUCATION

- B.S. degree in Computer Engineering, Computer Science, or Electronics Engineering specializing in software development.

Icon Systems, Inc. is an Equal Opportunity Employer, M/F/D/V