

Firmware Engineer III

Job Location – Versailles, OH

Job Summary:

Designs, develops, documents and tests software systems, especially embedded systems for use within equipment or machinery.

Duties and Responsibilities:

- Apply principles and techniques of software engineering to accomplish goals.
- Use familiarity with a variety of the field's concepts, practices, and procedures.
- Create and review others documentation of design to ensure software can be understood and maintained. Including, but not limited to: Architecture Drawing, Design Documents and In-code documentation.
- Generate software requirements distilled from system level requirement and other sources
- Participate in creation of system level requirements.
- Direct and document verification activities that demonstrate the design meets requirements. Including, but not limited to: Unit testing, Integration testing, System testing and Device functional testing.
- Be the functional point of contact with cross functional project teams to accomplish project/product objectives.
- Develop test systems for internal and external production processes.
- Ensure the designs comply with applicable regulatory standards, e.g. UL, TUV, CSA, and FDA.
- Mentor the members of the engineering group in the functional areas of expertise.
- Plan and organize work to meet project/product objectives.
- Design, develop and deploy highly responsive multithreaded embedded firmware capable of controlling various functions and interfaces from various sensors and accessories using SPI, I2C, CAN Bus interfaces, as well as interfacing with Wifi and BLE based control devices (mobile apps)
- Review requirements, product designs and translate them into product development plans and schedules

- Conduct technology research; conceptualize ideas into prototype and products
- Lead overall system architecture decisions
- Ability to manage multiple projects through the entire development, release and deployment cycle
- Ability to use advanced development/debugging tools; e.g. C compilers, linkers, ICE, logic analyzers, etc.
- Use familiarity with a variety of the field's concepts, practices, and procedures.
- Proven history of successful product development from concept to production

SECONDARY DUTIES:

- Provide technical mentoring.
- Increase knowledge in aspects of software engineering.
- Recommend and implement improvements to Midmark functional processes.
- Submit ideas for product and/or manufacturing improvements for current products.

Education & Experience:

Required

Bachelor's Degree in Electrical Engineering, Computer Engineering or Computer Science or a combination of education and 10 or more years of experience in a related field preferred. Minimum of an associate degree required.

COMPETENCY/SKILL REQUIREMENTS:

- Proficient in Microsoft Office Suite.
- Ability to multitask and problem solve.
- Knowledge of Enterprise Resource Planning (ERP) systems. Oracle preferred. PLM Agile preferred.
- Ability to analyze and interpret data and use that to influence change.
- Ability to prepare Test Protocols and Test Reports.

- Strong Attention to detail.
- Ability to work independently and collaboratively.
- Strong analytical and communication skills (written and verbal).
- Ability to read engineering documents.
- Ability to work under pressure and meet deadlines.
- Familiarity with Lean principles and concepts.
- Knowledge of FDA and ISO regulations.
- Ability to mentor engineers and share technical expertise
- Lead by influence throughout the organization.
- Advanced customer and market knowledge
- Strong planning and organizational skills.
- Strong mathematical and technical abilities.
- Ability to lead and manage projects and/or project teams.
- Ability to work with vague requirements and limited direct supervision.
- Expert in the subject matter or the functional areas of the assignments and influence the project team for the best practices related to that area.
- Strong decision-making abilities.
- Organizational awareness and strong business acumen.
- Experienced in complex problem solving and critical thinking.
- Ability to perform research on advanced technology and use that to influence product direction.
- Advanced knowledge of industry principles and concepts.
- Familiarity with UL Standards.
- Knowledgeable of the fundamental theory and the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of medical devices and services.
- Proficient with software developed tools, specifically Eclipse based tools.

- Proficient with NXP/Freescale processors.
- Ability to read, understand, and make suggestions to electrical schematics.
- IOT Platform (ARTIK, Xively, AWS IOT, etc).
- Wired Interface Comm (SPI, I2C, CAN, UART).
- Wireless Interface Comm (Wifi, BLE, ZigBee).