

Job Title: GeneCapture Software / Firmware Engineer

Opportunity:

Implement embedded control systems software and the high-level UI software for several novel new medical diagnostic devices. Work with a diverse team of scientists and engineers to bring these new products to life and take them through FDA approval and into production.

Relevant experience:

If you have worked with embedded microcontrollers such as Raspberry Pi, Arduino, or development platforms for the various high-end microcontrollers you have experience we are looking for. If you have worked in a Windows or Linux environment implementing analysis, UI, and communications software you have skills we also need. Additionally, if you have experience designing, testing, and documenting medical instruments you may be a perfect fit for this opportunity.

Job Description:

The developer is responsible for the design of software and firmware for use in durable medical equipment and test equipment. Design, implement, document, and test the software elements of high-quality medical devices. Work includes embedded operating system selection and porting, Windows applications, embedded applications (Linux and other), algorithm design, integration into custom hardware platforms, and test. Areas of focus include image processing, control system software, GUI, and appropriate levels of design controls, documentation, and test.

Define the software solution, the form of implementation, the test procedures to be used, and project planning. Apply structured software methodologies to architect and design software and firmware solutions. Design, document, code, integrate, and debug software. Use software development tools and hardware to analyze and test the solution and evaluate the results. Understanding and skills should include assembly language, drivers, API's, application software, operating systems, diagnostics, data bases, IT systems, and test software.

Essential Responsibilities:

- Proficiency in programming languages, software architecture, and algorithms.
- Proficiency in data analytics (such as - imaging, filtering, machine learning)
- Provide concepts that exhibit a high degree of creativity, functional simplicity, and overall design excellence.
- Work with software subcontractors and suppliers.
- Excellent organizational skills required to plan and execute schedules which meet or exceed requirements.
- Maintain a professional, cooperative relationship with both external and internal SMEs in order to be a productive team member.

Qualifications:

To perform this job successfully, an individual must possess strong analytical and engineering capabilities, and must be able to communicate effectively both verbally and in written form. The individual must possess a solid understanding of the product development process and the testing process.

Developer: Relevant Bachelor's degree. 0-5 years of experience.

Senior Developer: Master's degree or equivalent experience. 5-10 years of experience required, including familiarity with full product design.

Competencies required:

- Full system level design.
- Thorough documentation.
- Software validation testing.
- Integration and debugging.
- Understanding of control systems involving sensors and transducers is desirable.
- Understanding of software risk management is desirable.

Located in the HudsonAlpha Institute for Biotechnology, GeneCapture is a transformative workplace offering opportunities for professional growth in an innovative and collaborative atmosphere. The HudsonAlpha biotechnology campus consists of 152 acres nestled within Cummings Research Park, the nation's second largest research park. HudsonAlpha's state-of-the-art facilities co-locate nonprofit scientific researchers with entrepreneurs and educators.

Physical Demands/Environmental Factors/Mental Functions

ADA Requirements The physical demands, work environment factors, and mental functions described below are representative of those that must be met by an employee to successfully perform the essential function of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Disclaimer - All job requirements are subject to possible revision to reflect changes in the position requirements or to reasonably accommodate individuals with disabilities. Some requirements may exclude individuals who pose a threat or risk to the health and safety of themselves or other employees. This job description in no way states or implies that these are the only duties which will be required in this position. Employees will be required to follow other job-related duties as requested by their supervisor/manager (within guidelines and compliance with Federal and State Laws). Continued employment remains on an "at-will" basis.

Physical Demands

- Must be able to remain in a stationary position (sit or stand) for prolonged periods (50% of the time).
- Frequently moving between work areas.
- Frequent operation of common office equipment (e.g. computers, mobile devices, calculators, copiers, scanners).
- Vision abilities - close vision, distance vision, and ability to adjust/focus.
- Ability to lift 30 pounds
- Continuous mental and visual attention, requiring constant alertness or activity.

Environmental Factors

- Moderate noise level (i.e. business office with computers, phone, and printers, light traffic).
- Workspace is generally an indoor office setting and in other common and education spaces throughout HudsonAlpha with controlled temperature conditions.

Mental Functions

- Maintain emotional control under stress.
- Ability to understand complex problems and to collaborate and explore alternative solutions.

It is the policy of GeneCapture, in accordance with all applicable laws, to recruit, hire, train, and promote persons in all job titles without regard to race, color, religion, sex, age, national origin, disability, genetic information, sexual orientation, veteran status, or any other basis prohibited by applicable law.