

**Title:** Software Quality Assurance Engineer      **Reports to:** Director, Software Engineering

**Type:** Exempt, Salaried

**Description:**

The Software Quality Assurance Engineer is responsible for implementing a software assurance process for all software developed for SureScan's explosive detection system, supporting software and engineering tools. The Software Quality Assurance Engineer is responsible for all aspects of software quality and configuration management for SureScan. The Software Quality Assurance Engineer will develop methods, perform testing, track development/production software quality with metrics and lead teams as well as drive best practice behaviors into engineering and development processes. The Software Quality Assurance Engineer shall implement a process of independent reviews, analysis and test of the software to ensure the performance, reliability and maintainability of the software.

The Software Quality Assurance Engineer shall support the SureScan management team to review and improve the strategy, processes and procedures for the purpose of certification of the SureScan Quality Management System at the ISO 9001 or higher certification level(s).

The Software Quality Assurance Engineer will be located at the SureScan corporate headquarters in Binghamton, NY or Lawrence, MA.

Applicants should be motivated, able to learn new skills and methods quickly and be driven to achieve high quality and performance standards. Excellent communication skills are required.

**Duties & Responsibilities:**

Software Quality Assurance Engineer will provide leadership to complete and/or perform the following:

- Define use and test cases
- Establish and document test specifications, methods and procedures
- Develop test scripts and other automated test methods
- Implement tools for software quality validation
- Execute software verification tests and document results
- Create software quality metrics and track/report software quality
- Document and track issues and nonconformities using issue tracking tools
- Participate in development of software requirements and specifications
- Interface with management, engineering and regulatory agencies on configuration management issues
- Support product configuration audits for software configuration items
- Support advances in the SureScan software maturity model
- Support activities to achieve and maintain ISO 9000 compliance



**Education & Experience:**

- BS or higher in Mathematics, Computer Science, or Engineering, or relevant work experience
- Minimum 3 years of software test and/or software quality assurance experience

**Minimum Qualifications:**

- Knowledge of Microsoft Windows and Linux operating systems
- Knowledge of C/C++ programming languages
- Experience using Linux or similar operating systems
- Experience with sound software engineering practices, procedures and standards – version control of software and documents
- Ability to function effectively as part of a team, while also being able to work independently
- Proficient in use of office software tools (Microsoft Office, Open Office or equivalent)
- Excellent written, verbal, and interpersonal communication and teamwork skills
- Highly motivated individual able to maintain focus and produce results in a remote setting without a lot of direct supervision

**Desired Qualifications:**

- Strong math skills
- Experience using XML
- Experience with continuous integration
- Experience using scripting languages
- Prior experience with software test in complex electromechanical and/or imaging systems
- Prior experience testing and validating distributed software systems
- Experience working within a CMMI level 3 or higher software development process
- ASQ certification
- Ability to hold a US Security Clearance (Secret)

**Physical Demands:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this job, the employee is frequently required to sit
- The employee is occasionally required to stand and walk
- Lift and/or move up to 50 pounds
- Specific vision abilities required by this job include close vision, distance vision and depth perception



**Work Environment:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- While performing the duties of this Job, the employee is occasionally exposed to moving mechanical parts and X-ray equipment
- The noise level in the work environment is usually moderate
- Travel may be required, which will typically be less than 10% of time

