

POSITION DESCRIPTION

POSITION TITLE: Software Engineer

DEPARTMENT: Engineering

LOCATION: Broomfield, CO

Employment Type: Full-Time

Salary: \$75,000 - \$85,000

REPORTING RELATIONSHIPS

POSITION REPORTS TO: Director of Engineering

POSITION PURPOSE

The Software Engineer will play a critical role in the development and enhancement of software programs for our rapid pathogen detection products. Utilizing novel technology, the Software Engineer will contribute to the design, coding, testing, and implementation of software solutions, supporting our product development efforts aimed at delivering accurate and efficient pathogen detection.

ESSENTIAL FUNCTIONS AND BASIC DUTIES

1. Collaborate with cross-functional teams, including hardware engineers and scientists, to understand requirements and design innovative software solutions.
 2. Develop, test, debug, and maintain software programs to meet functional and performance standards.
 3. Participate in design reviews, ensuring scalable, maintainable, and efficient software architecture.
 4. Troubleshoot and resolve defects and technical issues during development, testing, and deployment.
 5. Conduct unit testing to ensure code quality and compliance with regulatory requirements.
 6. Stay current with emerging tools and technologies, recommending improvements to optimize product performance.
 7. Work with quality assurance teams to meet defined standards and assist with software validation.
 8. Document software functionality, code changes, and technical specifications for future development and maintenance.
 9. Provide technical support for integration and deployment processes.
 10. Follow software development lifecycle processes, including version control and documentation standards.
 11. Prioritize tasks and manage multiple projects to meet deadlines.
 12. Communicate effectively with team members and stakeholders, providing updates on project status and risks.
 13. Collaborate with external vendors to integrate third-party software components or services.
 14. Adhere to company policies, including those related to intellectual property, data protection, and information security.
 15. Maintain professionalism, ethical conduct, and confidentiality in all job activities.
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PERFORMANCE MEASUREMENTS

1. **Project Management:** Assess the ability to deliver software solutions on time and within budget.
2. **Quality of Software:** Measure software quality by tracking defects, bug reports, and customer feedback.
3. **Efficiency and Effectiveness:** Evaluate software performance based on processing speed, accuracy, and resource utilization.
4. **Code Maintainability:** Measure ease of code maintenance by reviewing readability, modularity, and adherence to standards.
5. **Collaboration and Communication:** Assess effective teamwork and communication with stakeholders, team members, and vendors.
6. **Problem Solving:** Evaluate the ability to resolve software issues by tracking the number, complexity, and resolution time of problems.
7. **Innovation and Improvement:** Measure contributions to innovation and continuous improvement in development processes.
8. **Adherence to Best Practices:** Evaluate adherence to software engineering best practices and standards.
9. **Customer Satisfaction:** Assess customer satisfaction through feedback, surveys, or interviews.

QUALIFICATIONS

EDUCATION/CERTIFICATION: Minimum of a bachelor's degree in computer science, software engineering, or a related field.

EXPERIENCE REQUIRED: Proficiency in programming languages such as Java, C++, Python, or others relevant to the company's software development needs. Experience and understanding of working with different operating systems such as Windows, Linux, or macOS. Proficiency in using integrated development environments (IDEs) such as QT Creator, Visual Studio, or PyCharm, as well as version control systems like Git or SVN.

BONUS EXPERIENCE:

- Familiarity with software development methodologies, including Agile, Waterfall, or DevOps, and understanding of the various stages of the software development lifecycle.
- Familiarity with concepts of database management systems and proficiency in SQL or other database query languages.
- Experience with Artificial Intelligence/Machine Learning
- Certified Software Development Professional (CSDP)
- Certified Software Engineer (CSE)
- Microsoft Certified: Azure Developer Associate
- Oracle Certified Professional (OCP) Java SE Programmer
- AWS Certified Developer - Associate

SKILLS/ABILITIES: Strong knowledge of software engineering principles, algorithms, data structures, and design patterns



Physical Requirements/ Work Environment:

- Ability to sit or stand for extended periods of time.
- Ability to lift 50 lbs. with reasonable accommodations.
- Duties are primarily performed on location with some tasks able to be completed off-site.

Benefits:

- We observe 10 Company Holidays, in addition, the Company provides Paid Time Off (PTO).
- Crystal Diagnostics offers medical, dental, and vision plans. Our insurance programs are designed to ensure you and your family have the coverage you need in case of illness, injury, or disability.
- Crystal Diagnostics offers a 401(k) Plan to support your planning for the future. You may choose to contribute to the Traditional 401(k) or the Roth 401(k) plan.

Equal Employment Opportunity

Crystal Diagnostics provides equal employment opportunities to all employees and applicants for employment and prohibits discrimination and harassment of any type without regard to race, color, religion, age, sex, national origin, disability status, genetics, protected veteran status, sexual orientation, gender identity or expression, or any other characteristic protected by federal, state or local laws.

This policy applies to all terms and conditions of employment, including recruiting, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training.