Senior Systems Engineer

Job Description

The Senior Systems Engineer designs, maintains, and plans the evolution of the software products and provides education and consulting to customers. This position works independently and in collaboration with cross-functional teams, analyzes requirements, and ensures the reliability and performance of complex systems and networks. The Senior Systems Engineer provides technical leadership and support to team members to ensure software performs per design specification to meet customer needs. They suggest, propose, and implement solutions for improving processes or products for both existing and new situations.

Required Education and Experience

Bachelor's or Master's degree in engineering (computer, industrial, or mechanical preferred) or a related field or equivalent relevant experience. Minimum of seven years of relevant experience, ten or more years preferred.

Essential Functions

- Reviews, analyzes, and translates customer and standards requirements into design of an engineering software product or enhancements to existing products
- Visualizes the evolution of the software functionality in the context of future functionality needs
- Analyzes trade-offs in usability, performance, cost, and maintainability to recommend the best pragmatic solution
- Performs gap analysis on requirements versus existing solutions and makes recommendations on how to close gaps, identifying trade-offs and scope
- Evaluates detailed test plans and use cases, including boundary conditions and adherence to standards, to ensure test requirements and coverage is met for the functionality defined in the requirements specifications
- Sets up test environments (i.e., installation of ISS software on MS Windows systems)
- Identifies shortcomings in current test environments and ensures shortcomings are not present in other test environments
- Reviews and provides feedback to teammates' proposed solutions and tests
- Analyzes input from other Engineers, Developers, and external information for relevancy and impact

- Organizes and implements new ways of improving product, efficiency, code quality, and maintainability
- Evaluates source materials for customer user documentation as well as internal documentation for knowledge transfer to ensure accuracy, completeness, consistency, and quality
- Evaluates requirements defined/inferred in engineering data standards and data modeling
- Areas of focus include standards such as the ASD (Aerospace and Defense Industries Association of Europe), S Series, and SAE (Society of Automotive Engineers) specifications and knowledge gained is used internally but may also be shared with the governing standards committees
- Regularly makes recommendations for improvements in the software and/or standards supported by the software
- Assists frontline Customer Support and customers when technical expertise is required
- Provides training to Customer Support to reduce future support requirements on Engineers
- Interacts with customers or other employees to understand and interpret customer requirements, recommend ways to satisfy functionality in existing product, or propose solutions not available in the current product then provide cost estimates for desired solutions
- Provides technical leadership to team or project leadership
- Mentors other as needed

Additional Functions

- May serve as Team Lead on complex or multi-product teams
- May actively participate in industry/regulatory events
- May interact directly with customers on specific customer issues
- May perform software product or subject matter training

Core Competencies

- Expert understanding of the systems requirements definition and standards being support by software
- Excellent verbal and written communication skills with the ability to define, communicate, and document complex system requirements in support of the software development, both internally and externally
- Excellent analytical and problem-solving skills
- Eagerness to identify, evaluate, and adapt new technologies to address challenges across multiple areas
- Ability to execute complex activities with impact at a project level, possibly with visibility external to the organization

- Ability to conduct thorough research, evaluate costs/benefits, and make actionable recommendations
- Ability to complete tasks independently
- Ability to translate complex and multi-system technical requirements into software specifications
- Ability to mentor others

Common Competencies

- Effective time management and organizational skills while working on multiple projects or roles
- Confidence working in MS Windows operating system
- Comfortable working with MS Office applications (e.g., Word, Excel, PowerPoint)

Work Environment

This full-time position operates in a professional office environment and is largely sedentary. Days and hours of work are Monday through Friday, 8:00 a.m. to 5:00 p.m., although standard hours may vary upon manager approval with potential for a hybrid work schedule.

EEO Statement

Equal Employment Opportunity has been, and will continue to be, a fundamental principle at ISS, where employment is based upon personal capabilities and qualifications without discrimination because of race, color, religion, gender, age, national origin, disability, or any other protected characteristic as established by law.