

PR/161222 | Senior Systems Engineer

Job Information

Recruiter
JAC Recruitment Malaysia

Job ID
1618535

Industry
Medical Device

Job Type
Permanent Full-time

Location
Malaysia

Salary
Negotiable, based on experience

Refreshed
November 3rd, 2026 09:00

General Requirements

Minimum Experience Level
Over 3 years

Career Level
Mid Career

Minimum English Level
Fluent Level

Minimum Japanese Level
None

Minimum Education Level
Associate Degree/Diploma

Visa Status
No permission to work in Japan required

Job Description

A leading global provider of laboratory automation, life sciences instrumentation, and diagnostic solutions is seeking a Senior Systems Engineer to join its expanding Research & Development team.
In this role, you will serve as the technical lead throughout the full product development lifecycle, from analyzing existing systems and defining product requirements to developing system architectures, evaluating concepts, and driving implementation. You will work closely with Product Management, engineering teams, and stakeholders to deliver innovative laboratory instruments and automation solutions that meet customer, regulatory, and business requirements.
The ideal candidate combines strong systems engineering expertise with broad interdisciplinary knowledge across mechanics, electronics, software, and optics. You are an experienced technical leader who enjoys solving complex engineering challenges, mentoring engineers, and influencing product architecture decisions. You possess excellent analytical thinking, communication skills, and the ability to balance technical trade-offs while ensuring project success.

Key Responsibilities

- Lead the complete lifecycle of new product development and system enhancement projects, from concept creation through implementation and validation.
- Analyze existing instruments and systems to identify opportunities for product improvement and innovation.

- Collaborate with Product Managers and user groups to gather, define, and negotiate system and product requirements.
- Develop, review, and maintain system architecture documentation, concept evaluations, and technical specifications.
- Lead and facilitate design reviews, ensuring solutions meet technical, quality, and regulatory requirements.
- Generate, evaluate, and select system concepts and architectural alternatives based on technical and business considerations.
- Provide technical leadership during product development and implementation activities across multidisciplinary engineering teams.
- Conduct feasibility studies and evaluate emerging technologies relevant to laboratory automation and life science applications.
- Lead complex root cause investigations and troubleshooting activities for product and system-level issues.
- Drive risk management activities throughout the development lifecycle.
- Plan and oversee configuration management processes and engineering change activities.
- Monitor market and technology trends to identify opportunities for future product innovation.
- Mentor and coach engineers, promoting engineering best practices and continuous professional development.
- Support continuous improvement initiatives related to systems engineering methodologies, processes, and standards.

Key Requirements

- Bachelor's Degree or higher in Mechanical Engineering, Electrical Engineering, Software Engineering, Computer Science, Systems Engineering, or a related technical discipline.
- Minimum 6 years of experience in complex instrument, automation equipment, or medical device development environments.
  Strong experience in systems engineering, requirements engineering, and interdisciplinary product development.
- Proven experience leading technical development activities across cross-functional engineering teams.
- Good understanding of mechanical, electronic, software, and optical technologies.
- Experience in risk management, design reviews, and product architecture development.
- Ability to analyze, simplify, and communicate complex technical concepts to both technical and non-technical stakeholders.
- Strong knowledge of product development processes and engineering best practices.
- Excellent problem-solving and root cause analysis skills.
- Strong written documentation and technical communication skills.
- Ability to mentor, guide, and influence engineering teams while working effectively in collaborative environments.

Preferred Qualifications

- Experience within the medical device, diagnostics, laboratory automation, or life sciences industry.
- Knowledge of relevant quality systems, regulatory standards, and compliance requirements for healthcare or laboratory products.
- Familiarity with microfluidics, liquid handling technologies, or analytical instrumentation.
- Experience with project management methodologies and product lifecycle management processes.
- Knowledge of system scalability, reliability engineering, and long-term architecture planning.
- Experience contributing to technical strategy, innovation roadmaps, or industry best practices.
- Exposure to international product development environments and global engineering teams.

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Company Description