

Automation Engineer, Projects and Applications



Description

The Automation Engineer for Projects and Applications is responsible for designing, developing, programming, and implementing automation equipment and systems for Clean Logix product lines that integrate with existing plant systems and processes (EPX product line). The role covers all technical aspects of automation throughout the project lifecycle, including initial concept, prototyping, testing, deployment, installation, and ongoing maintenance. The Automation Engineer ensures that automation solutions meet customer specifications, quality standards, and project timelines. This role requires proficiency in automation principles, programming languages, software tools, and strong problem-solving skills. The engineer collaborates directly with cross-functional teams, including mechanical, electrical, and software engineers, project managers, and customers. This position reports directly to the Principal Engineer of Automation, who works under the guidance of the Director of Product Management.

Responsibilities

- Provide Tier 2 technical and customer support, including remote machine access, customer communication, code and database review, minor bug resolution, data recovery, and other PLC-based product support.
- Assist with pre-sales consultation, pre-installation consultation, integration training, onsite installation, and controls support for EPX and other PLC products
- Create detailed designs for automation systems, including electrical, mechanical, and software components for engineering and production use
- Create electrical and pneumatic diagrams, along with process and instrumentation diagrams, and controls interconnect diagrams for customer projects
- Collaborate with project managers and customers to facilitate onsite installations, integration, and training for PLC-based product lines
- Develop, implement, and maintain PLC and UI/HMI programs and provisioning methods
- Conduct thorough testing and validation of automation systems to ensure functionality, reliability, safety, and quality
- Work closely with cross-functional teams, including mechanical, electrical, and software engineers, as well as project managers and customers, to ensure project success

Soft Skills

- Ability to dissect intricate problems, deconstruct them into manageable parts, and formulate effective solutions through logical reasoning and critical thinking.
- Excellent written and verbal communication skills to collaborate effectively with colleagues, explain technical concepts to non-technical audiences, and interact professionally with customers.
- A collaborative team player who can work efficiently in a fast-paced and agile environment, share knowledge, and foster a positive team dynamic.
- Creative problem-solver with a passion for innovative solutions.
- Proactive self-starter capable of independently initiating and completing tasks.

Hard Skills

- Solid understanding of automation principles and software engineering best practices.
- Familiarity with Function Blocks, Functions, Programs, Structs, Enums, Interfaces, Methods, and Properties.
- Knowledge of Software Concepts (Object-Oriented Design Principles, Loose Coupling Concepts, IEC 61331-3 Standards).
- Proficient in Rockwell Studio 5000, Codesys IDE, SkyCad, Copia, git, FactoryTalk Optix,
- Experience with Structured Text and Ladder Logic Programming.
- Proficient in Controls Design, including schematic design and troubleshooting of Electrical, Pneumatics, and Liquid Process Systems
- Working knowledge of Level 3/IP networking topics, including NAT, cross-network routing, port forwarding, and DHCP.
- Understanding of Communication Protocols, Serial communication (basic concepts and differences, including RS-232, RS-485, CANBus, and Modbus)
- Familiarity with Ethernet communication (basic concepts, including Ethernet/IP and Modbus TCP).
- Proficient in Systems, including SQL Databases and Linux CLI (Debian-based), Advanced Windows OS Configuration.
- Proficient in Microsoft Office, including Word, Excel, and PowerPoint (or Google Docs, Sheets, and Slides).

Benefits

- This is a full-time position with some travel required
- Monday-Friday, 9:00 a.m. to 5:00 p.m. (40 hrs. per week)
- Salary based on experience level
- Medical, dental, and vision insurance (eligible after 90 days)
- 401(k) plan with matching (eligible after 90 days)
- Paid time off, vacation and sick days (eligible after 90 days)

CleanLogix

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