Controls Integration Engineer

Job Scope

As a Controls Integration Engineer, you will work in a highly cross-functional environment, collaborating closely with sales, projects, support, development, and engineering teams to plan and execute control integrations. This will involve participating in the design, development, testing, and integration processes. You will get the chance to work on a variety of different projects and collaborate with different teams.

Responsibilities

- Innovate and develop advanced station-level logic based on engineering specifications, incorporating cutting-edge technologies and industry best practices.
  Collaborate with cross-functional teams to implement sophisticated control systems that optimize performance.
  Enhance and expand station-level and supervisor-level reporting systems, integrating additional data points and analytics for comprehensive insights.
  Implement data visualization techniques to facilitate a deeper understanding of system performance.
  Elevate user experience by developing and refining station-level graphics, ensuring an intuitive and efficient interface for operators and end-users.
  Implement user-friendly design principles to enhance the visual representation of control systems.
  Develop advanced commissioning tools beyond basic automation, streamlining the installation process and ensuring seamless integration.
  Implement automation features to enhance the efficiency of commissioning procedures.
  Create and deploy support-level tools with enhanced functionalities, providing comprehensive support for ongoing maintenance and troubleshooting.
  Develop tools that enable predictive maintenance, reducing downtime and enhancing system reliability.
  Develop comprehensive documentation and training materials for projects, ensuring that support staff can effectively operate, maintain, and troubleshoot the integrated control systems.
  Conduct training sessions to disseminate knowledge and expertise within the organization.
  Integrate control stations seamlessly with the Internet of Things (IoT) platform, enabling real-time data exchange and remote monitoring capabilities.
  Implement IoT protocols and standards to enhance connectivity and interoperability.
  Continuously explore and test new hardware devices to stay at the forefront of technological advancements.
  Evaluate the compatibility and performance of emerging hardware technologies for potential integration into control systems.
  Developed and deployed automated scripts for station updates and adjustments, minimizing

manual intervention and ensuring consistent system updates.
Implement version control systems to manage and track changes effectively.
Design and implement custom modules tailored to specific project requirements.
Create modular components that can be reused across different projects, promoting efficiency and consistency.
Integrate robust cybersecurity measures into control systems, ensuring the protection of sensitive data and preventing unauthorized access.
Stay abreast of cybersecurity trends and implement best practices for secure control system integration.

Requirements

- 3+ years working with Tridium Niagara-based systems
  Proficient in Baja and BQL
  Working knowledge of commercial HVAC and lighting systems
  Ability to program at various levels of complexity and design while following best practices
  Working knowledge of PX/HX and XML
  Experience with BACnet, Modbus, and other common BAS protocols
  Ability to read engineering and as-built drawings
  Niagara N4 developer certification
  Working knowledge of Bajascript, HTML, CSS, Viscosity, Python, and shell
  Working knowledge of Zigbee, Wifi, and other wireless protocols
  Experience with Linux
  Experience with creating engineering drawings and schematics
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