



Senior Electrical/Controls Engineer

Job Summary

We are looking for a motivated Senior Electrical Engineer who is eager to spread their wings and push the company strategically. You will immediately make a lasting impact on our projects. Every project will be different, so it takes an Engineer who possesses a creative and customer-focused mindset with an internal drive to tackle any issue that comes their way to ensure a positive customer experience.

The person in this role will provide effective engineering leadership, input, and the electrical design on a project basis. They will serve as a pivotal contributor to multiple aspects of projects including planning, design, document, programming, purchase, integration, testing, training, and commissioning work of electrical control systems.

This position will be responsible for designing and programming control systems involving PLCs. Provide the direction, technical expertise, and effective communication to the project team. Utilize strong analytical skills to resolve complex technical challenges. Self-directed and outcome-oriented in achieving ambitious project goals.

- Contribute to concept and engineering design development of electrical control systems.
- Oversee and participate in schematic design, electrical panel design, PLC and HMI programming, implementation of Ethernet and other industrial LAN networks, field installation and project commissioning.
- Actively participate in scheduled design reviews with contractors, architects, engineering consultants, and other project team members and provide project status updates as required for Project Review and other company meetings.
- Develop, execute, supervise, and review prototype testing and debugging of control systems of new assemblies/structures.
- Visit manufacturing/vendor sites to inspect and test components before shipping to jobsite.
- Interface with field personnel and purchasing to determine and obtain required components.
- Stay current on advance technology in control software and hardware development, have basic electrician abilities and knowledge of codes (N.E.C., etc.).
- Provide advanced technical expertise to support Uni-Systems Engineering Inc.'s Sales and Marketing efforts.
- Takes on responsibility of all phases of the design-build, including design, production, and installation.

Benefits of Employment

- Competitive salary
- Opportunity for growth
- Medical insurance
- Dental insurance
- Vision insurance
- HSA and FSA options
- Life insurance
- ST and LT Disability insurance
- 401K plan with above market company matching
- Generous Paid Time Off (PTO) plan
- Company Holidays

Job Requirements

Education

- B.S. Degree from an ABET accredited institution in Electrical Engineering, Systems Engineering, Computer Engineering is preferred, or equivalent control system design and programming skills.
- M.S. Degree from ABET accredited institution in Electrical Engineering, Systems Engineering, or Computer Engineering is advantageous.
- P.E. registration is advantageous.

Experience

- 5 to 9 years' applicable experience.
- Extensive experience with PLCs, I/O, HMIs, as well as VFDs, servo drives, and other motor controllers.
- Proficiency with AutoCAD, Visual Basic, and/or C is advantageous.
- Experience with control system programming and creating software design documentation.
- Proven track record in developing and implementing standard electrical engineering practices, as well as provide detailed documentation upon project completion.
- Designed and laid out control system architecture.
- Exposed to designing for functional safety.
- Managed risks associated with unprecedented custom designs.
- Worked with clients' input to innovate and creatively solve multifaceted problems.

Knowledge

- Must be able to read and understand electrical diagrams.
- Complete understanding of industrial automation and electrical control systems.
- Must understand the characteristics of 3-phase motors and their control, both electromechanically and electronic, as well as commonly used sensors and measuring loops.

- Knowledge and fluency with Rockwell (Studio 5000) PLC programming.
- Knowledge of basic computer architecture, networking, and operating systems.
- Knowledge of the National Electrical Code.
- General knowledge of Mechanical systems.

Skills and Abilities

- A logical mind and an aptitude for problem solving is a must.
- Efficiently research, integrate, and apply new technologies in unprecedented ways with minimal oversight.
- Provide innovative solutions to difficult technical issues.
- Confidence to put forth new ideas and the humility to accept the best idea regardless of origin.
- Ability to manage time and follow scheduled completion targets for projects.
- Skillful at solving electrical design problems involving motor control and automation, automation design, load calculations, programming, and related activities.
- Advanced PLC programming skills.
- Identify technical costs and schedule impacts.
- Communicate effectively with clients, customers, or official contacts.
- Ability to work successfully within a team, cross-functionally, and independently.
- Excellent verbal and written communication skills.
- Travel (domestic and foreign) during installation and commissioning of projects, up to 5-10% of the time.

Opportunities

- Act as assistant project manager or handle a small project as a project manager.
- Direct small or specialized teams in pursuit of a task objective.
- Take a proactive role in teaching and mentoring others in their department.

About Uni-Systems Engineering

Uni-Systems Engineering is a single source provider of custom mechanization for iconic structures and attractions that deliver impressive experiences for our customers and the general public. We partner with engineers, architects, and construction managers to mitigate risk and deliver functionally integrated, reliable showpieces. Our team of mechanical, structural, and electrical engineers specializes in providing custom, project-specific solutions to complex and unprecedented engineering challenges. We work in a wide range of industries including Stadiums and Ballparks, Telescope Observatories, Amusement and Entertainment, Aerospace, Manufacturing, and Residential. Please see our website (www.uni-engineer.com) for more project information