

Requisition: SYM HR 20-004

Posting Date: November 11, 2020

Location: Raleigh

Title: Controls and Instrumentation Engineer

Description:

We are a dynamic engineering company headquartered in Raleigh, North Carolina with a satellite office in Columbia, South Carolina seeking qualified controls and instrumentation engineering to develop and program control schemas, data acquisition systems, and Human Machine Interfaces for specialized machines and manufacturing systems that are used to perform powertrain testing, gauging and manufacturing. Symbrium works with technical communities inside some of the largest corporations in the world that produce such things as aircraft engines, wind turbines, locomotives, automotive powertrains and other highly engineered precision systems. The ideal candidate must be hands on with an academic background in Mechanical Engineering, Electrical Engineering or Physics. Classes in vibrations, dynamics, control theory and/or linear algebra are helpful. It is very important that the candidate enjoy writing code and have a desire to learn how to build complex machines and highly custom control systems.

Responsibilities:

- Develop safe, efficient and reliable control schemas based around PLC and Computer architectures
- Specify and integrate motors, drives, actuators and other automation devices
- Select and integrate specialized sensors used to measure complex processes
- Create and modify PLC and HMI code to support both new and existing machine platforms
- Design control panel layouts using CAE based on approved concepts and functional specifications
- Work with the engineering and design team to generate complete packages of detail drawings, bills of materials and build instructions that are sufficient for the procurement and fabrication of machine control systems
- Assist the engineering and build teams in the assembly, integration and validation of machines on the floor
- Ensure compliance to design and quality standards

Mandatory Qualifications:

- US Citizen
- 4 Year Degree in Engineering or Related Field
- Excellent organizational and communication skills are required.

Desired Special Skills:

- Proficient in 2D CAD such as AutoCAD
- Experience working in an Engineering or Physics Laboratory
- Working knowledge of PLC and HMI
- Familiar with industrial automation

Other:

After a few years in this position, you will evolve into a Senior Controls Engineer and will ultimately have “cradle to grave” responsibility for the design, development, and deployment of automated manufacturing, testing and quality systems.