



Controls Engineer

Summit Engineered Automation, Shoreview, MN

Controls Engineer

Shoreview, Minnesota

Benefits Offered

Vision, Medical, Life, Dental, 401K

Employment Type

Full Time

The Role:

Summit Engineered Automation is looking for a highly motivated individual to support our Automation Team in designing and building automation and robotic equipment that produces a wide range of products. The ideal candidate will possess the necessary skills to bring a machine from concept to installation; this includes concepting, proof of concept, software design/programming, electrical component selection, electrical layout/schematics, debug of hardware and software, acceptance testing and installation.

Our preferred platform is Allen Bradley for automation control, Keyence for machine vision and Epson or Fanuc for robotics. Other platforms may be specified by our customer so the ideal candidate should be willing to learn new hardware and software as necessary.

The ideal candidate takes pride in their ability to take a project from concept to completion. Collaboration, communication both internally and externally, analytical ability, and attention to detail are a must for this position.

The primary role of a Controls Engineer is to lead all aspects of the controls for automated equipment. This includes working with Mechanical Design Engineers, Electrical Engineers, customers and vendors.

Responsibilities:

Software Design:

- Create design documentation and flow charts of proposed software for review.
- Program all software for unique projects with a variety of needs (PLC, HMI/SCADA, Servo, Robotics, Vision, etc.)

Machine Vision:

- Specify cameras and lensing to fit the application
- Experiment with lighting setups
- Integrate vision programs with the machine automation

Electrical Design:

- Research new developments and innovations as appropriate for customer's projects, applications, and specifications.
- Modify and test concepts to prove and debug the systems to ensure they will pass customer acceptance

- Create panel layouts, schematics, and bills of material. Create machine manuals, FAT and SAT documentation. Redline schematics.

Start-up and Debug:

- Test and verify all electrical wiring and systems (safety circuits, I/O, communications, servos, etc.)
- Debug and test all software to assure it meets customer requirements.

Acceptance Testing:

- Assist in testing and documenting the final machine.
- Provide training and support.

Installation:

- Travel to customers site to assist in start-up of equipment.
- Train customers in machine operation.

Desired Experience:

- PLC and HMI controls (primarily Allen Bradley CompactLogix, PanelView Plus)
- Servo Motion (Allen Bradley, IAI)
- Vision Inspection and Vision guided motion (Keyence, Epson)
- Robots (primarily Fanuc and Epson)
- Electrical schematic design using AutoCAD Electrical
- Solid Works

Required:

- BS Electrical Engineering/Mechanical Engineering or equivalent experience.
- 2+ years of experience in electrical control system design and programming for custom automation.

About Summit Engineered Automation:

Summit Engineered Automation is a custom automation manufacturer that helps their customers achieve their goals and objectives by tailoring our in-house automation solutions and fabrication services. Using our Collaborative Design philosophy, we develop innovative and creative concepts for our customers needs using new technology and solutions to bring them to life. We have a fun, but hardworking environment for those that enjoy a collaborative team approach and a positive work/life balance in their day to day work environment.