

Controls Engineer Job Description

Adaptive Innovations Corp. provides complete turn-key automated solutions specializing in custom automation, robotics, tooling and test equipment. Adaptive is located in Lakewood, CO and is a rapidly growing firm offering an exciting work environment with constantly changing and growing challenges. Adaptive is seeking a creative and driven controls engineer to join our team.

Responsibilities:

- Design & develop electrical and controls system solutions for custom machinery. Present & review solutions with customer's team.
- Design & develop machine interface software. Present & review solutions with customer's team.
- Setup machine communication networks, map I/O and develop machine logic.
- Bring-up, test and refine machine performance.
- Ensure all relevant safety objectives and legal requirements are observed for all work completed.
- Interpret client requirements, identify and address design parameters and engineering problems and ensure solutions are implemented accurately and within budget.

Engineering:

- Analyze project requirements and perform technical calculations supporting design including electrical requirements, robotic safety standards, and motor controls.
- Create and finalize designs to meet project requirements.
- Create accurate Bill of Materials.
- Define equipment and parts from external suppliers.
- Conduct cost and time estimation and compare to project budgets.

Project Execution:

- Participate in project workflow and support internal and external resources to ensure timely delivery of projects and expected quality.
- Electrical and software design of customized solutions including manufacturing automation and safety systems. Able to maintain project scope and identify project creep.
- Support manufacture, build, and validation of systems which include pneumatics, servos, VFD's, relays, communication networks, touchscreens, pushbuttons and robotic integration.
- Create customer documentation such as user manuals, control system diagrams, network diagrams, and electrical drawings.
- Ability to architect programs that are simple to test, well documented and versatile.
- Maintain accurate records and files according to quality standard.
- Commission customized products and systems onsite and at customer facilities.

Job requirements:

- Applicants must be a citizen of the United States.
- A Bachelor's Degree in Electrical Engineering (or similar related degree).
- 3-5 years related job experience.
- Proficient with MS Office, Allen Bradley RSLogix 5000, AutoCAD Electrical.
- HMI programming experience desired.
- Robot programming experience desired.
- Machine vision system programming experience a plus.

- Strong fundamental knowledge of control and electrical system design and its application in automated industrial designs including specification of vision, power, sensors, inspection, and communication systems.
- Knowledge of NFPA 79.
- Efficiently organize and plan work tasks to meet company goals.
- Critical thinking with exceptional problem solving skills, able to work independently and in team environments.
- Proactive, resourceful & highly motivated with good communication skills and ability to work in high output environment.
- Ability to balance multiple projects.
- Travel as required to support projects.