

**Job Title:** Senior Electrical Engineer, Functional Safety

**Department:** Engineering

**Summary:** Online Development Inc is continually pushing the envelope in developing the next generation of industrial automation products and solutions. The nature of our business leads us to be nimble and entrepreneurial in our development.

As a Senior Electrical Engineer, you will provide technical input into and implementation of the engineering life cycle of hardware products including architecture, design, implementation, production release, and production support. Work is generally independent and collaborative in nature. Experience developing industrial products that comply with functional safety requirements is required.

**Job Responsibilities:**

- Leads the engineering life cycle of hardware products including architecture, design, implementation, production release, and production support.
- Creates hardware design solutions such as digital circuit design, microprocessor-based board level design, FPGA-based designs, analog circuit design, power supply design, and printed circuit board schematic entry and layout.
- Simulates and tests design concepts to assure that design meets the product requirements. This may include computer simulations, proof of concept development, or prototype testing.
- Uses computer assisted engineering and design software and equipment to perform engineering and design tasks. Experience with PADS, OrCAD, GC-Prevue, and Omnify is preferred.
- Demonstrates expertise in a variety of the field's concepts, practices, and procedures. Mentors other engineers in those areas.
- May specialize in complex technical and business matters.
- Analyzes requirements to determine feasibility of product proposal.
- Works with product management to clarify and resolve project requirements.
- Prepares or directs preparation of product or system layout and detailed drawings and schematics.
- Directs and coordinates manufacturing of prototype product or system.
- In conjunction with the Test Team, plans and develops experimental test programs.
- Analyzes test data and reports to determine if design meets functional and performance specifications.
- Evaluates engineering test results for possible application to developments of systems or other uses.
- Maintains an active role in transition of product from design into production including: fabrication, process development, testing, failure analysis, and inspection.
- Works with quality assurance on customer technical issues that cannot be resolved by other resources.
- Applies mathematical and engineering principles and methods used in the development process.



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- Contributes to complex aspects of a project.
- May assume a project team leadership role.

**Qualifications:**

- Formal functional or process safety training and certification from a recognized body such as TUV, exida, or ISA highly desired.
- Experience developing electronic hardware systems that meet functional safety standards such as IEC 61508. (Also accept avionics and/or DOD experience.)
- Experience with fault tolerant design, redundant design, or high availability design.
- Experience developing electronic hardware systems that meet product certification requirements, such as UL, CE, or IEC 61010.
- Experience developing electronic hardware systems that meet security standards, such as IEC 62443.

**Competencies:**

- Job Knowledge
- Verbal and Written Communication
- Interpersonal Relations
- Planning and Organization

**Education:**

- Bachelor's degree or equivalent and at least four years related functional safety experience and/or training; or equivalent combination of education and experience.
- Formal functional or process safety training and certification from a recognized body such as TUV, exida, or ISA highly desired.
- Typically requires 7+ years of related experience.



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