



## Senior Electrical Engineer

### Job Description

Department:	200 - Engineering	Reports To:	Principal Engineer
Positions Supervised:	This position may have supervisory responsibilities		
Travel Required:	5%	FLSA Status:	Exempt
Schedule:	M-F 8:30-5:30	Classification:	Full-Time
Last Revision Date:	4/9/2024	Location:	Oldsmar, FL

### Job Summary

**Senior Electrical Engineer** has overall responsibility for the electronic design of products, including firmware and software that may be applicable to the product. The Sr EE will apply knowledge of electronic circuits, microcontroller-based signal processing, databases, and communication protocols such as those used across the internet, to design small low and micro-power systems for retail security. This position will have end-to-end responsibility for user applications that rely on cloud-based back-ends. As such, knowledge of web front-end and middleware languages will be used. He or she will design for moderate volume, high mix production using accepted quality processes to achieve extremely low cost with high yield.

### Duties and Responsibilities

The following are duties and responsibilities for the position. Other duties or functions may be performed as assigned.

- Ownership of design from concept through production, driving successful product launch with aggressive timetables
- Development of product and/or system architecture
- Design micro-power analog and digital circuits including microcontrollers
- Design and write microcontroller code using appropriate development tools
- Design for manufacturing, test, and regulatory compliance objectives
- Design for interaction with cloud-based back-end systems
- Create database schema and integrate appropriate transaction protocols between products and back-end systems
- Conduct Design Reviews with peers and cross-functional team members
- Effectively communicate with cross functional team members at VPG, external suppliers, partners, customers as needed
- Project scheduling/estimation and defining performance requirements

### Required

- BSEE required; MSEE preferred
- 5-10 years' experience in electronics design and development from concept through production
- Knowledge of network topology/infrastructure
- Extensive skill with embedded system software languages and protocols (e.g. C, C++, RTOS, TCP/IP, etc.).
- Proficiency in schematic capture, PCB layout experience, including specifying components
- Demonstrates a commitment to accuracy and quality while meeting goals or deadlines
- Proven track record of managing at the project level
- Demonstrated ability to coach technicians and/or less senior engineers, and to provide electronics leadership for mechanical engineers

## Preferred

- RF circuit and IoT device design experience
- Experience designing and writing code for mobile apps
- Experience designing and writing code for web servers
- Develops innovative ideas, break-through advancements, and innovative solutions
- Uses understanding of the business to create strategies for competitive advantage

## Certificates, Licenses, Registrations

This position does not require certificates, licenses, or registrations.

## Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. This position may require extended periods of standing, sitting, as well as some repetitive movements and repetitive lifting of minimal weight. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## Work Environment

The work environment has a normal level of office sound. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## Travel

Travel may be required to customer installations, test sites, suppliers, or other locations to support design efforts. Estimated travel 5%

## Supervisory Responsibilities

This position does not have direct supervisory responsibilities.

*Vanguard Protex Global is a drug-free workplace.*

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**Employee Name**

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**Employee Signature**

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**Date**