



Electrical Systems Engineer

Job Description

Intelon Optics is a rapidly-expanding world class technology and innovation company.

In this multi-disciplinary position, you will be responsible for developing and maturing electronics and automation systems in the design and development of a medical diagnostic Brillouin Spectroscopy device. Your hands-on skills will be an asset in the application of solid electrical engineering and software prototyping skills to rapidly prove out electro-mechanical and electro-optical concepts. The ideal candidate will bring experience controlling a wide variety of devices in order to hit the ground running (e.g. camera, motors, control boards, buttons, joysticks, etc.). Working closely with a team of engineers, consultants, and vendors, you will use your strong product development and design for manufacturing experience to conceptualize product configurations and robust designs for highly sensitive electro-opto-mechanical instrumentation.

In this fast-paced startup environment you will need excellent interpersonal skills, keen attention to detail, excellent communication/documentation, and ability to collaboratively and responsively, focusing on key priorities based on new information and product development timeline. You should have high energy and excitement to contribute to cutting-edge technology that improves medical care.

This role is based in our new state-of-the-art innovation center, located in Lexington, MA.

Responsibilities

- Working with fellow engineers, identify electronic components and create electronic system systems based on engineering specifications
- Prototype electronic power, signaling, and control of optomechanical subsystems
- Specify and create wiring harnesses (power, low voltage signaling, etc.) for miscellaneous modules
- Create circuit board layouts for fabrication
- Working with software engineers, program controllers and embedded boards to control devices
- Execute design reviews, manage bills of materials, inventory, and create necessary documentation per ISO 13485 regulations
- Work with fellow electrical, optical, systems, software, and industrial design engineers to integrate subsystems into designs.
- Interface with suppliers or outside engineering groups as necessary to complete projects

Minimum Qualifications

- Expertise in electrical systems and automation
- Graduate degree in Electrical Engineering, Electromechanical, Robotics, Biomedical Engineering, Physics, or related field
- 5+ yr industry experience in robotics, electromechanical, or optomechanical system design in a tightly regulated environment (e.g. medical device, defense, aviation/automotive).
- Proficiency and proven track record in design for manufacturing of complex subassemblies in a collaborative team setting
- Solid programming experience in at least 2 different languages (e.g. C++/C#, Python, LabVIEW, Matlab, Java, etc.)
- Experience programming embedded control boards (e.g. Arduino-type, TI, etc.), mixed signals, and serial communication protocols /I2C

Preferred Additional Qualifications

- Applied Graduate or post-graduate training in an optical/physics/medical based application
- Experience in laser and/or camera imaging systems
- Ability to design and fabricate detailed custom electronics boards and specify complex electrical design requirements
- Familiarity with Medical Device regulations (ISO 60601)

Benefits

Competitive salary and benefits with company incentive plan.

As part of our dedication to the diversity of our staff, Intelon Optics, Inc. is committed to Equal Employment Opportunity without regard for race, color, national origin, ethnicity, gender, protected veteran status, disability, sexual orientation, gender identity, or religion.

To Apply

Please email team@intelon.com with your resume and a cover letter attached.