

Electrical Engineer or Physicist

Job Description

This ideal candidate is a hands-on electrical engineer or physicist with 5-7 years experience in the design and development of spectroscopic instrumentation, who will join a growing high tech company located in the Fitchburg Route 2 corridor of Massachusetts. The person will be responsible for both the hardware and software development of the next generation of imaging and spectroscopic based instruments. The person must be self motivated and have the analytical skills and proven product expertise that will thrive in the fast paced environment of a venture-funded environment and be able to work on critical, high visibility projects with the industry's most prestigious civilian research agencies and military branches throughout the world.

Experience, and Skills

- A minimum of 5-7 years experience in the design and manufacture of complex optical and spectroscopic instrumentation
- Detailed knowledge of CCD, InGaAs and infrared imaging cameras.
- Ability to write and troubleshoot software in LabView, C++, Python and Embedded C.
- Ability to design, prototype and troubleshoot high speed analog and digital circuits, embedded systems and real-time data acquisition systems
- Knowledge of optical design packages such as Zemax or TracePro
- Working knowledge of spectroscopic instrumentation and spectroscopic techniques in the UV, Visible and NIR
- Good writing skills and the ability to write and critique specification documents and manuals

Education and Background

- BS, MS or PhD degrees in electrical engineering, electro-optics, physics or a related field.
- Familiarity with the design of optical instruments & systems for commercial, space and military applications.
- Good communication skills and the ability to work easily with customers
- Position requires either U. S. Citizenship or Permanent Resident status.
- Willing to travel both domestically and internationally (5-10%)

The ability to combine electrical engineering and optics knowledge to develop innovative instruments is a key attribute to the position. Extensive experience with CCD, InGaAs and MCT detector assemblies is highly desirable. The individual will work with customers, the Headwall manufacturing team, and with external vendors and take an engineering lead in component specification and system testing. The ability to work as a team member, to communicate effectively, and to take on localized project management responsibility is highly desirable.

Business Environment

Headwall Photonics, located in Fitchburg, Massachusetts is a leader in the design and high volume manufacture of spectral imaging solutions, single and multi-point spectrometers utilizing original holographic diffraction gratings. Headwall offers its worldwide base of customers a range of integrated spectroscopy solutions that are designed and manufactured for application-specific performance in the Analytical, Life Sciences, and Military/Defense industries.

Qualified candidates: Please contact us at Jobs@headwallphotonics.com