

Mechatronics Engineer

Company Overview: Sentek Instrument LLC is a high-tech company specializing in developing and manufacturing unique sensor instruments to meet critical and long-standing sensing needs unmet by other commercial offerings. Operating within the Virginia Tech Corporate Research Center, we are at the forefront of innovation across multiple fast-growing industries.

Position Overview: We are seeking a talented and highly motivated **Mechatronics Engineer** to join our vibrant team. In this role, you will contribute to the research, development, and manufacturing of cutting-edge sensors, playing a key part in delivering solutions that make a significant impact.

Responsibilities:

- Manufacture of pressure sensors for extremely high temperatures
- Implementation of electronic sensor interrogators
- Sensor calibration and testing
- Research and development of new products

Qualifications:

- Bachelor's or advanced degree in Mechanical Engineering, Electrical Engineering, Computer Engineering, Material Science or a related field
- Proficient coding skills of microcontrollers (e.g. TMS320)
- SPI communication between multiple PCB boards
- Microcontroller-to-PC high-speed data transmission via USB
- Ability to develop graphical user interface (GUI) using C++
- Experience in mechanical design and finite element analysis
- Proficiency with SolidWorks
- TIG welding experience a strong plus
- Ability to work effectively both independently and as part of a team
- Strong problem-solving skills with a goal-oriented mindset

Benefits:

- Competitive compensation package
- 401(k) matching and retirement plan
- Paid time off (PTO) and health benefits
- Opportunities for professional growth in a fast-paced, innovative environment

Location: Blacksburg, Virginia—a college town offering a high quality of life, excellent schools, and ample outdoor activities. It's a welcoming community ideal for both individuals and families.

Equal Opportunity Employer: Sentek Instrument LLC is an equal opportunity employer committed to creating an inclusive workplace for all employees regardless of background.

How to Apply: To apply, please send your resume and cover letter to hr@sentekinstrument.com. We look forward to exploring how you can contribute to our team's success.