



Sensor Payload Engineer/Scientist

Job ID: 23-05

Location: Lebanon, New Hampshire

Job Type: Full-Time, Exempt

White River Technologies, Inc. is a small, high-tech company focused on research & development, testing, evaluation, and commercial support services for geophysical sensor and software technologies. Located in Lebanon, New Hampshire and Newton, Massachusetts, our scientists and engineers are developing new technologies that utilize magnetic, electromagnetic, radar, acoustic and electro-optical sensing for defense, environmental, and energy applications. We are recognized as a national leader in explosive hazards detection and classification technology development and have a reputation for building innovative solutions to complex problems.

We are seeking a Sensor Payload Engineer/Scientist to join our growing R&D team in geophysical sensing systems development. The candidate will be responsible for supporting or leading research and development of the next generation of sensor-related technology for remote characterization of environmental, military, and civil infrastructure applications. The applicant will work in a multi-disciplinary team to assess new technology solutions in areas critical to national defense and infrastructure. Work will include sensor hardware and software development, debugging, testing, and data analysis. Candidates should have a strong understanding of magnetometer, electromagnetic/electro-mechanical/optical detectors and detection processes and specialized experience in executing scientific research and development projects. Work includes new initiatives in explosive device detection, infrastructure characterization and security, and defense-related sensing applications including sensor system architecture analysis, sensor payload integration, data analysis, and robotic system interface development and implementation.

Essential Duties and Responsibilities

- Support the design and development of sensor and data acquisition platforms
- Development of sensor systems and sensing techniques for detection, tracking, and classification of objects of interest and physical system characterization
- Provide test and evaluation support for research and systems projects involving magnetometer or electromagnetic sensing methodologies, autonomous vehicle-based sensing and sensor processing approaches to enhance system functionality through design, simulation, analysis, and experimentation
- Collect data including set up and calibration of sensor systems and field equipment
- Travel to field sites to test and evaluate sensor payloads on robotic platforms (airborne and underwater)
- Work as a member of a team and explore ways to improve our quality, better serve our clients, and innovate new solutions

Education, Experience, and Skills

- Bachelor's or Master's degree in Engineering, Physics, or other technical field.
- 0-5 years of experience working with sensor systems, analog and digital electronics, and software programming including experience with laboratory and field instrumentation
- Experience with sensor-related research and/or military sensing applications for DOD, DOE or other related agencies; especially with electromagnetic or electro-optical systems
- Preferred familiarity with magnetic, electromagnetic, RF, and/or electro-optical sensors
- Demonstrated aptitude to quickly learn new technologies required
- Demonstrated adaptability, flexibility, perseverance, and a positive attitude required

Please submit all resumes and correspondences to jobs@whiterivertech.com and reference the Job ID in the subject line.