



Physical Scientist/Geophysicist

Job ID: 23-07

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 Physical Scientist / Geophysicist to join our growing R&D team in geophysical sensing and signal processing. The candidate will be responsible for supporting or leading research and development of the next generation geophysical technology for detecting, mapping, characterizing, and interpreting natural and man-made surface and subsurface media. The applicant will have a strong academic background in physics and preferably geophysical methodologies and technologies. Work will include development and application of forward and inverse algorithms, data mining and analytics, classification, and parameter and state estimation. Candidates should have a strong understanding of electromagnetic detection processes and specialized experience in executing scientific research and development projects. Work includes new initiatives in magnetic sensing, magnetic resonance, time- and frequency-domain electromagnetic induction, radar, and physical acoustics.

Essential Duties and Responsibilities

- Development of algorithms and techniques for detection and discrimination of buried or concealed hazards such as pipes, cables, unexploded ordnance, and tunnels
- Invent and apply data processing, inversion, detection, classification, and data fusion algorithms including numerical modeling and simulation
- Provide test and evaluation support for research and systems projects involving improved sensing methodologies, human- and robotic-based sensor processing approaches to enhance system functionality through simulation, analysis, and experimentation
- Collect data including set up and calibration of sensor systems and field equipment
- 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, Master's, or PhD degree in Physics, Geophysics, Electrical or Civil Engineering or other technical field.
- 1-10 years of experience working with sensor systems, robotics, digital electronics/software programming including experience with laboratory and field instrumentation
- Strong background in computational methods to include data processing and modeling
- 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 electromagnetic, RF, and/or electro-optical sensor systems
- Demonstrated aptitude to quickly learn new technologies required
- Strong ability to work in a team environment
- Excellent oral and written communication, publication, and client interfacing skills required

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