EM Noise Cancellation & Signal Processing Specialist

Do you want to advance the future of intelligent sensing technologies? Are you itching to dive into hard problems and come out on top? Do you want to work for a company who's intensely focused on developing intelligent innovations AND great relationships?

GroundMetrics has a reputation overcoming challenges and is growing by challenging conventional wisdom and breaking through walls to get the job done!

In this role, you'll thrive as an EM Noise Cancellation & Signal Processing Specialist combining your two passions for EM technology and solving tough noise cancellation challenges to drive innovation and help ensure our game-changing ideas are leading the energy industry. GroundMetrics has the most sensitive and stable low-frequency electric-field sensor systems in the world but needs sophisticated noise cancellation solutions to fully harness the power of these patented sensors. Even where our sensors are 100x more sensitive than current state-of-the-art, only a fraction of that is realized when operating in electromagnetically noisy environments.

You'll develop and implement algorithms for electromagnetic noise cancellation solutions to improve signal-to-noise (SNR) and enable sensitive detection. You'll be deep in the world of adaptive filtering and electromagnetic interference and you'll develop and deploy innovative approaches to the measurement of small signals deep below the earth. You will also drive future sensor and transmitter inventions as well as deployment configurations and acquisition methods because our technology team is integrated throughout the signal chain. You'll be working with the largest dataset of onshore oilfield EM data available and working with leading scientists and engineers in this space to solve problems in dynamic environments.

This is a rare opportunity to change the energy industry. You will not only be a key player in GroundMetrics growth but will also have a direct impact on an emerging technology leader in the energy space. You will also have tremendous flexibility in your schedule, where you work, and how you focus your time.

What experience will help get you there?
You are innovative and RESOURCEFUL. You have a BIAS TO ACTION and break through walls to get things done. You OWN your desk and embrace responsibility to deliver results.

You are a CREATIVE and PRAGMATIC problem solver who is comfortable following proven methods and eager to change procedures that don't work. You are a strong algorithm developer and have extensive experience in practical electromagnetic noise cancellation.   Your noise cancellation experience is primarily in lower frequency electromagnetics, below 1kHz, as opposed to wireless (RF) or acoustics.

You've used your advanced degree and experience in mathematics, physics, electrical engineering, signal processing or computer engineering to help detect small electromagnetic signals in the presence of large noise interference.   A PhD is a plus.

You are comfortable with uncertainty because you know it's a catalyst for true innovation. You thrive on moving and failing fast and aren't afraid of mistakes because you know they are fuel for fast innovation. You have history of being able to manage time, prioritize, and work independently with little direction.

We are looking for a talented and versatile noise cancellation specialist who wants to work in a fast-paced, game-changing setting where you can truly make a difference in the company and in the industry. Location of this role is flexible.

If you are the person that will conquer this role, email careers@groundmetrics.com with your resume and references.

Who are we?
San Diego-based GroundMetrics is an early stage, fast growth company commercializing cutting-edge electromagnetic sensor system technologies and predictive data analytics for underground exploration and production. We offer advanced underground surveying and imaging technologies, primarily to the oil, gas, carbon sequestration, and geothermal industries, but the core technology is truly a platform that extends well beyond those industries. Our unique technologies and innovative approaches unlock new applications and markets. **We are passionate about delivering EM sensing solutions and know that building an awesome team is the most important part of getting it done!** www.groundmetrics.com

What we've done!
GroundMetrics has invented and developed the eQube™ – the only onshore low frequency capacitive electric-field sensor (patented); a new borehole casing source method (patented); the Eos™ – the only EM sensor integration with a wireless seismic data recorder (enabling the only real-time, in-field EM quality control system); and the Imon™ – the most accurate source waveform monitoring system in use. We've applied machine learning techniques in a new way to take full advantage of large, diverse EM datasets (patents pending). All of our technologies are grounded in both computational modeling and the large volumes of onshore EM data we acquire (1 million measurements and counting).

GroundMetrics, Inc. is an equal opportunity employer. GroundMetrics, Inc. does not discriminate in employment on account of race, color, religion, national origin, citizenship status, ancestry, age, sex, sexual orientation, marital status, physical or mental disability, military status or unfavorable discharge from military service (for any applicable states, or based upon sexual orientation, gender identity and or gender expression).