



## Job Description for Research and Development Engineer:

At AWE Technologies LLC, we identify and manipulate physical properties of fluids and matter non-invasively by utilizing wave theories from optics, acoustics, microwave, and electromagnetic. AWE also deploys unique imaging and acoustic separation technologies for various biomedical and industrial applications. Our scientists focus on innovation, solving challenging problems, and creating solutions from visionary science for a better life with transcendent technologies for a safer world. Our unique solutions with disruptive potential utilize a variety of sensor technologies. We take a broad multi-disciplinary view in addressing needs from customers in different markets and bring the expertise from decades of experience in solving challenging technical problems from both industry and US government.

This unique position will be part of a small team focused on technology innovation and developing novel sensing approaches. This person will be reporting directly to the cofounder and chief technology officer of AWE Technologies.

### Job Summary

We invite applicants who are interested in working on a range of applied research projects that extend from energy-related sensors, threat reduction to biomedical applications. The primary objective of the research is to solve practical problems for the industry and government. The work involves development of new techniques, customized instrumentation, and measurement validation. The successful candidate will be expected to contribute to the development of new sensor technologies and patents. There will be opportunities to work in a wide range of areas that extend beyond acoustics to optics, EM waves to chemistry. This is a unique opportunity for rapid growth and we invite you to become part of our mission to help change the world for the better.

### Required Skills

- Strong background and demonstrated hands-on experience in one or more areas: Sensor technologies in general, Ultrasonic techniques, Nondestructive measurement techniques, Wave propagation measurements, Numerical Analysis, Signal processing, Computer-controlled experimentation.
- Fluency in one or more Computer Programming Languages (e.g., Python, Matlab, C++, Mathematica, etc.).
- COMSOL Multiphysics modeling
- Possess extensive hands-on experience in designing and conducting experiments.
- Demonstrated experience in conducting original scientific research through peer reviewed publication record.
- Excellent communication skills in English (both oral and written)



- Knowledge of electronics and of typical laboratory test instruments.
- Demonstrated ability to work independently and with minimum supervision.
- Ability to adapt to new requirements for projects and be flexible enough to learn new areas of research as needed.
- Able to work effectively as part of a team in a multi-disciplinary environment and interact effectively with people with a variety of expertise
- Demonstrated ability to plan and organize tasks so that schedules are met on time.
- Experience in Chemistry lab testing and procedures is a plus

### Minimum Qualifications

*We are looking for applicants at multiple levels that begin from BS to PhD and this role is focused on MS and graduate student candidates. Some jobs are at entry levels more appropriate for college students (including grad students), while others require significantly more experience.*

- An MS in Applied Physics or in engineering discipline (e.g., mechanical, electrical, chemical, biomedical). A BS level candidate with equivalent experience or skill level will also be considered
- Scientifically creative thinker with a visionary, optimistic outlook.
- A strategic planner with sound technology skills, analytical ability, good judgment and strong operational focus
- Adaptable, resourceful and entrepreneurial, undaunted by technical and operational challenges.
- Adept at navigating complex and rapidly evolving organizational structures to get work done
- Maintain high level of trust and integrity under strict confidentiality
- Must be a US citizen (or permanent resident for exceptional candidates)

### Desired Competencies:

- Dedicated, respectful, and willing to put in the effort to realize the opportunity and vision to change the world
- Highly organized
- Thrives in a dynamic & collaborative environment
- Scientifically creative
- Entrepreneurial resourcefulness
- Intellectual property savvy
- Outstanding communication skills (written and verbal)
- Exemplary ability to understand the interests and intentions of all stakeholders

**Please send resumes to: [jobs@awetech8.com](mailto:jobs@awetech8.com)**

Our main office and Laboratory is in a 9500 sq-ft. facility located in the South Shore of Long Island, NY with a Satellite office at: 100 N Clinton Avenue, Bay Shore NY 11706