



SI2 Technologies, Inc.

**267 Boston Road
N. Billerica, MA 01862**

Senior Antenna/Array Research & Development Engineer

SI2 Technologies' (SI2) mission is to enable our country's warfighters to win by providing solutions to RF/MW and survivability challenges. In the defense market, our solutions enhance the warfighter's effectiveness while providing increased protection against current, new and emerging threats. SI2 is a small business which offers a dynamic, merit based work environment where highly motivated employees excel and are urged to reach their full potential. SI2 is currently seeking highly motivated, hands-on candidates for a Senior Antenna/Array Research & Development Engineer position. The ideal candidate likes working on a team and thrives on learning new approaches to solve challenging problems. In short a team player loves to see the team win!

SI2 prides itself on design velocity and innovation, generating multiple new and unique RF solutions per year. The Senior Antenna/Array Research & Development Engineer will contribute as a key member of SI2's RF Systems R&D team by maintaining SI2's state of the art technological position in antennas and arrays through continued development of SI2's existing technology, as well as developing new technology. The successful Senior Antenna/Array Research & Development Engineer will help grow SI2's contract R&D business by executing on existing contracts and identifying and securing new R&D contracts, primarily from the Government. In addition to growing the contract R&D business, the Senior Antenna/Array Research & Development Engineer will support our product development and production teams by developing new intellectual property which can be transitioned to product development, as well as providing technical support during product development and through production as needed.

Job Description

The successful Senior Antenna/Array Research & Development Engineering candidate will be an innovative & energetic, self-motivated and "hands-on" engineer responsible for the following job functions both individually and as a member of the RF Systems R&D team:

- J Execute & provide systems level expertise on technical tasks for existing and new contracts to develop new antenna/array systems, technology and processes; communicate challenges, approaches and results, and support the Program Manager in setting cost and schedule requirements
- J Support the contract R&D business segment by writing and winning Small Business Innovative Research (SBIR) proposals and supporting the Business Development Team on other non-SBIR proposals and white papers
- J Support product development technical activities
- J Develop trusted partner relationships with both Government and Prime Contractor SME's
- J Maintain up-to-date technical and non-technical job knowledge through professional development activities and participation in professional organizations and societies

Exemplifications of Job Functions

A successful Senior Antenna/Array Research & Development Engineer will meet the following key deliverables mentioned below.

For execution of technical tasks on existing and new contracts to develop new RF systems technology and processes:

- J Design and prototype antenna/array systems for EW, ISR, radar and communication applications

-)] Test antenna/array systems, analyze results in comparison to predicted performance and provide assessment of design, manufacturing process and performance
-)] Execute on all R&D contracts by meeting or exceeding customer expectations and technical performance within the program cost goals and schedule requirements.
-)] Deliver innovative RF Systems solutions that differentiate SI2 from the competition
-)] Write technical reports, prepare presentations and present results

To support the contract R&D business segment by:

-)] Articulate the SI2 antenna/array systems value proposition to current and future customers
-)] Developing innovative antenna/array solutions and writing and winning SBIR proposals
-)] Supporting the Business Development Team on non-SBIR proposals and white papers
-)] Prepare and present capabilities presentations to Government and Prime Contractor SME's
-)] Contribute to the contract R&D technical team increase in SBIR Phase I win rate, achieve 100 percent win rate on SBIR Phase I to Phase II transitions and increase non-SBIR contract R&D revenues
-)] Achieve assigned annual contract R&D backlog targets for new and follow-on business

In support of product development technical activities:

-)] Support Product Development and Production contracts by meeting or exceeding customer expectations and technical performance within the program cost goals and schedule requirements
-)] Develop new antenna/array systems which can be transitioned to product development
-)] Identify current and emerging customer requirements

To develop relationships with both Government and Prime Contractor with SME's:

-)] Develop white papers and capabilities presentations
-)] Represent SI2's technical capabilities at customer meetings, conferences, and trade shows in conjunction Business Development and Senior Management

To maintain up-to-date technical and non-technical job knowledge through professional development activities and participation in professional organizations and societies:

-)] Develop and maintain professional development plan with Human Resources
-)] Implement professional development plan
-)] Maintain active membership and participation in one or more IEEE societies

Desired Education and Experience:

-)] A M.S. degree in electrical engineering or related field with 5+ years' demonstrated experience in antenna/array systems research and development. A Ph.D. degree in electrical engineering or related field is a plus.
-)] Hands-on experience in the analysis, design, prototyping, and implementation of antenna/array systems for military EW, ISR, radar and communication systems. Background in development and analysis of advanced concepts for active phased array and broadband antenna systems. Working knowledge of military EW, ISR, communications and radar systems. Conformal and/or low profile antenna and array experience is a plus. Absorber design and modelling experience is a plus.
-)] High proficiency with 3-D full-wave electromagnetic modeling tools such as CST, HFSS, and Microwave Office, as well as simulation tools such as MatLab, Simulink and other internally developed software.
-)] Hands-on experience writing, winning and executing R&D contracts and grants, e.g. BAAs, SBIRs, etc., for DoD and/or other US Government agencies. Technical experience working with the DoD and Defense

Prime Contractors on contract R&D programs. Experience working in a small business environment is a strong plus. Previous relationships with Defense Prime Contractor and DoD SME's is a plus.

- J Exceptional communication skills (both written and verbal) and leadership qualities. Team-player with ability to influence and motivate others. Innovative, enthusiastic and open to new ideas. Enjoy teamwork and excel in a dynamic multi-tasking, small business environment.

Requirements:

The successful candidate must have the following qualifications:

- J US citizenship is required.
- J Must possess high proficiency with 3-D full-wave electromagnetic modeling tools such as CST, HFSS, and Microwave Office.
- J Must have good organizational skills; be self-motivated, detail-oriented, enjoy teamwork and excel in a dynamic environment.
- J Must be able to obtain a DoD Security Clearance. Existing DoD Security Clearance is a plus.
- J Occasional travel will be required.

Job Environment

- J **Merit-based Team Work** – At SI2, we have assembled an action-oriented team of smart, creative and energetic technical and business experts passionate about our mission. The dynamic team is comprised of highly educated and talented people in the fields of electrical, mechanical, materials, manufacturing and aerospace engineering and chemistry. Our diverse backgrounds, experiences, and perspectives are the keys to our performance. Our team works in an energetic, flexible and small business environment. Each member of the team is offered the reward of individual responsibility with professional mentoring and support to excel and discover his/her full potential to make the greatest impact to the team.
- J **Innovative Technology** – At SI2, we help enable our country's warfighters to win by providing solutions to RF and survivability challenges. We solve complex warfighter problems through "smart" electronic system solutions. Our solutions utilize a combination of conventional and proprietary design, materials and manufacturing techniques to enhance the warfighter's effectiveness while providing increased protection against current, new and emerging threats. Using this technology, our team creates rapid, innovative and cost-effective solutions to the complex and ever-changing battlefield problems facing today's warfighters... We make things smart™.
- J **Excellent Compensation** – At SI2, we believe in rewarding the hard work of our employees with a generous benefits program that we strive to improve and upgrade to meet the needs of our employees. We offer an attractive, complete benefits package, which includes medical, dental, vision, life, AD&D and disability insurance, Flexible Spending – Health and Dependent Care, 401(k), immediate fully vested Company contribution to 401(k) and more. In addition, our employees receive paid time off for holidays, illness, personal use and vacation.

SI2 Technologies is an Equal Opportunity Employer EEOC - M/F/D/VEEO.

To apply for this position, e-mail your resume, salary requirements and statement of citizenship to jobs@si2technologies.com. Reference the Job Opportunity Title in the subject line.

Attention Agencies & Other Vendors:

At this time, SI2 Technologies, Inc. is not seeking any outside assistance to find qualified employees.