



POSITION: Electrical Engineer

JOB ID: 643895

LOCATION: Livermore, CA

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation. We are a world-class team of scientists, engineers, technologists, postdocs, and visiting researchers—all focused on cutting-edge technology, ranging from homeland defense, global security, biotechnology, and environmental preservation to energy and combustion research, computer security, and nuclear defense. To learn more, visit <http://ca.sandia.gov/>.

DEPARTMENT DESCRIPTION

Sandia California's Cyber-Physical Systems Department is responsible for engineering solutions which contribute to the safety and security of the nation. Primary activities include the development of instrumentation systems and the research and development of next-generation subcomponents to support weapons test flights. We are further engaged in a diversity of partnerships with groups such as cyber security to provide digital hardware verification; radiological and nuclear sensing to provide detection algorithms and hardware; and physical security to evaluate water-side sensing systems. Employees have skills in digital/analog design, digital communications, digital signal processing, control theory, computer science, computer security, and physical security. Principal sponsors include the Department of Homeland Security, the Department of Defense, the Department of Energy, and other federal, state, and local agencies.

JOB DESCRIPTION

Applies integrated technical judgment--which requires using the scientific method to recognize and formulate problems, to collect data through observation and experimentation, and to formulate and test hypotheses--to anticipate, innovate, and deliver solutions to Sandia National Laboratories missions. Roots the work in the fundamentals of science and engineering while applying a deep understanding of engineering and scientific principles. Creates and applies scientific theories and laws and engineering methods used within scientific and engineering disciplines to develop or demonstrate new designs, concepts, materials, machines, products, processes, or systems. Uses physical and computational simulation, analysis, and evaluation as inherent activities of development. Plans, conducts, and executes Sandia's science and engineering programs within the spectrum of fundamental research, development, or demonstration.

Researches, designs, and tests new electrical or electromagnetic components, equipment, systems, and networks using the technology of electricity, especially equipment for power generation and distribution or for motor control. Designs electrical equipment, controls, components, systems, and products. Assesses capabilities of existing electrical components, equipment, systems, and networks. Develops inspection and test procedures for components and systems.

QUALIFICATIONS

Required:

This position requires an advanced degree in electrical engineering, computer engineering, or related engineering or science discipline with an emphasis in FPGA design and verification. A Ph.D. is desired but strongly qualified candidates with an M.S. degree will be considered. Other requirements include (1) a strong record of academic and technical performance; (2) the capacity to learn and demonstrate technical depth in a wide range of fields; (3) excellent communication skills, including strong writing, interpersonal, and briefing capabilities; and (4) the ability to contribute within a team of diverse collaborators.

Desired:

Desired qualifications for this position include experience in or an aptitude for compression, cryptography, signal processing, physical security, or cyber-physical systems.

ABOUT SANDIA

Sandia provides employees with a comprehensive benefits package that includes medical, dental, vision, and a 401(k) with company-match. Our culture values work-life balance; we offer programs such as flexible work schedules with alternate Fridays off, on-site fitness facilities, and three weeks of vacation. In addition, Sandia/California enjoys close proximity to San Francisco, the Silicon Valley, first-tier universities, and diverse cultural and year-round recreational opportunities.

HOW TO APPLY

Visit <http://tinyurl.com/m5i73m2> and click 'Apply Now.'

Sandia National Laboratories is an Equal Opportunity Employer M/F/D/V. If this position requires a security clearance granted by the U.S. Department of Energy (DOE), U.S. citizenship and employee eligibility for clearance processing will be required at the time of hire. If you hold dual citizenship and accept a job offer for a position that requires a DOE-granted security clearance, you may be asked by DOE to renounce your foreign citizenship and retain only your U.S. citizenship.