Sandia National Laboratories

LIVERMORE, CALIFORNIA

POSITION: Informatics/Complex Systems Researcher **JOB ID:** 62042

MANAGER: Heidi Ammerlahn

JOB DESCRIPTION

We have multiple openings in computer science and applied mathematics for full-time researchers at the junior and senior levels. We are particularly looking for experts in informatics and data mining, numerical algorithms for simulations, and/or computational mathematics for complex systems. Staff members are expected to conduct innovative research, publish and present results in refereed journals and conferences, develop open-source software, and seek out new and interesting problems of national importance.

REQUIRED CRITERIA

(1) Advanced degree (Ph.D. or equivalent) in computer science, mathematics, statistics, or a related area, with a strong record of academic performance (3.5 GPA or higher); (2) ability to work in a collaborative research environment; (3) evidence of relevant research expertise in the form of technical publications, presentations, software, and/or knowledge of applications; (4) software development competence in C++, Java, MATLAB, or a related language; (5) proficiency in solving problems, prioritizing work, and making decisions; (6) excellent written- and oral-communication skills; and (7) the ability to obtain a U.S. Department of Energy security clearance (which requires U.S. citizenship).

DESIRED CRITERIA

(1) Expertise in one or more of the following areas: scientific computing, graph analysis, linear algebra, machine learning, game theory, statistics, numerical analysis, optimization, computational combinatorics, data mining, mathematical physics of complex systems, information theory, decision theory, data fusion, and systems modeling; (2) software engineering proficiency, including an understanding of object-oriented programming techniques and best practices, high-performance computing experience, and/or SQL database knowledge; and (3) a background in solving practical problems in science and engineering that involve encounters with real-world data. Additionally for senior level candidates: (4) familiarity with the processes for obtaining and managing research funding, including building project teams, writing grants and progress reports, and working with sponsors; and (5) evidence of professional service to the community, such as service on program committees, workshop organization, and/or editorial work.

Apply at: http://public.ca.sandia.gov/casite/careers/. Click on Browse current job openings, and type the Job ID number into the Keywords box. Click on the Search button to access this job opening, and complete an online application.

DEPARTMENT DESCRIPTION

The Informatics and Decision Sciences Department at Sandia/California deals with large-scale, complex, real-world problems that require innovative, but realistic solutions. The work of the department impacts a wide variety of applications in national security, engineering, computational biology, systems studies, and other areas. Our results are published in leading technical journals and conferences, and much of our software is freely available to the research community.

ABOUT SANDIA

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://public.ca.sandia.gov/casite/.

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.

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.