

Postdoctoral Research Scientist in Data Sciences

Computational Sciences and Engineering Division Oak Ridge National Laboratory Oak Ridge, Tennessee

ORNL07-57-CSED

Project Description:

The Data-Systems Sciences and Engineering (DSSE) Group at Oak Ridge National Laboratory's Computational Sciences and Engineering Division (CSE) leads projects of national importance in data-management, data dissemination, and data analysis. As a leader in the federal applications space for over twenty years, DSSE has taken systems from the research stage to standardization, development, and, with industrial partners, to deployment. The mission for DSSE is to address data-science problems in application domains including energy, environment, society, commerce, and national security.

DSSE is currently seeking to hire post-doctoral research scientists to establish and conduct work within the field of data-sciences with special emphasis on data-middlewares supporting asynchronous data-dissemination, complex event processing, data-provenance and data-quality tracking, optimized querying and searching, and large-scale real-time and streaming data analysis. Research scientists serve as principal investigators for multi-disciplinary and multi-agency programs. They may also consult as specialists in one or more advanced domain-specific data-systems projects.

Qualifications:

Masters and/or PhD degree required in Computer Sciences, Engineering or Mathematics and Statistics. Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

Advanced degree (PhD awarded or imminent) in computer science or computer engineering with emphasis on databases, operating systems, and distributed middlewares. In-depth experience with significant multi-discipline high performance computing projects. High-degree of software and operating systems expertise: E.g., tools/environments. C++/C#/Java/Threads/Socket Programming/J2EE – Net-Web- Services; expertise with SQL programming on MySQL/Oracle/Sequel Server; capability with Web 2.0. Computing skills and facility with high performance computational environments to develop parallel computational methods and algorithms for data management and visualization. Excellent communication (oral and written), strategic planning, organization, leadership, and decision-making skills. Good interpersonal skills and strong ability to be a team contributor.

Responsibilities:

- Publish and present research in professional for, and to the scientific community.
- Conceive, design, and implement innovative research methods involving data-infrastructure and applications for distributed systems.

- Contribute to development of middleware tools for decision support, data-mining, data-provenance tracking, probabilistic data-verification, naming, discovery, and reliable and high-performance storage/retrieval.
- Develop and apply algorithmic techniques for data analysis.

How to Apply:

Qualified applicants may apply online at https://www2.ornl.gov/ORNL_POST/. All applicants will need to register before they can begin the online application. For complete instructions, on how to apply, please see the instructions at <http://www.ornl.gov/orise/edu/ornl/ornl-pdpm/application.htm>. When applying for this position, please reference the position title and number (ORNL07-57-CSED).

This appointment is offered through the ORNL Postdoctoral Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.