Engineering Science and Technology Division (ESTD) at Oak Ridge National Laboratory (ORNL) seeking post doctoral and post master Computer Science candidates

Please note: the nature of the work on national security programs in this position requires that the candidate be a United States citizen.

BASIC FUNCTION OF POSITION: The Transportation Policy and Planning Group in the Engineering Science and Technology Division (ESTD) at the Oak Ridge National Laboratory (ORNL) is seeking to identify post doctoral and post master candidates. ESTD is seeking computer science graduates with training and experience in transportation network modeling, .NET programming, and SQL server skills. This individual must have demonstrated experience in applications development. The Transportation Policy and Planning Group consist of staff members who develop integrated inter-modal transportation solutions through innovative and cost-effective research and development. The group's activities encompass transportation energy and environmental concerns, safety and security challenges, planning and policy issues, systems engineering, military transportation, supply chain management, and freight systems. The group develops systems for air, highway, maritime, rail, and multimodal transportation. The Group's research and development work has contributed to the secure, efficient, safe, and free movement of people and goods in the United States. Specific expertise in the group includes transportation engineering, data acquisition and analysis, simulation, optimization, GIS, software engineering, and knowledge management.

MAJOR DUTIES AND RESPONSIBILITIES: The selected candidate will conduct research and development in the areas of transportation security, transportation planning, GIS, and simulation-based analysis. The candidate will design and develop algorithms, software, simulations, and application interfaces. The candidate will work with researchers in the Transportation Policy and Planning Group, throughout the Engineering Science and Technology Division, and across ORNL. The candidate will interface with the U.S. Department of Energy (USDOE), Department of Homeland Security, other federal agencies, and other existing and potential customers, sponsors, and collaborative partners. The candidate will also be expected to participate and make presentations at technical conferences associated with professional societies and support the publication of original work in peer-reviewed journals. Over the long term, the candidate will be expected to lead research and development project teams and work directly with sponsors.

EDUCATION, EXPERIENCE, AND SKILLS: The position requires a Ph.D./master's degree in computer science or an equivalent combination of education and experience. The candidate must have a working knowledge of Visual Basic .NET and C++. The candidate must have excellent writing skills for preparing reports, proposals, and publications/journal articles, and possess excellent communication skills to effectively give presentations as well as to interface with project sponsors and project teams. The candidate must possess the desire to work in a team environment on technically challenging projects involving national and international security and transportation system infrastructure. The candidate must be a self-starter who knows how to learn and is interested in broadening his/her knowledge. The nature of the work on national security programs requires that the candidate be a United States citizen. Frequent travel may be required.

For additional information on the Engineering Science and Technology Division click on the following URL: http://www.ornl.gov/sci/engineering_science_technology/

For additional information on the Transportation Policy and Planning Group click on the following URL: http://cta.ornl.gov/cta/.

The Transportation Policy and Planning Group is located at the National Transportation Research Center (a joint research facility of ORNL and the University of Tennessee) in Knoxville, TN.

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. Expected duration of these appointments is one year with the possibility of an extension.

Interested candidates need to apply as soon as possible.

For immediate consideration, send a resume and list of three or more references to the following address, or e-mail to fergusontd@ornl.gov

For technical questions regarding the position, please contact Dr. Rekha Pillai at pillairs@ornl.gov

Please reference the position title and number (ORNL06-04-ESTDrv), when corresponding about this position.

This appointment is offered through the ORNL Postdoctoral Research Associates Program (http://www.orau.gov/orise/edu/ornl/ornl-pd/ornlpdoc.htm).