

Postgraduate Research Associate in Systems Engineer in Enterprise Knowledge-Based Systems

**Engineering Science and Technology Division
Oak Ridge National Laboratory
Oak Ridge, Tennessee**

ORNL08-14-ESTD

Project Description:

The Decision Engineering Group in the Engineering Science and Technology Division (ESTD) at the Oak Ridge National Laboratory (ORNL) is seeking identify postdoctoral and postmaster candidates. The Decision Engineering Group's focus is on research and development associated with building, maintaining and development of enterprise knowledge-based systems – integrating advances in operations research, mathematics, statistics, decision analysis, software engineering, database, data mining, expert system, and Geographic Information System to systematically analyze, model, solve, and visualize problems in the areas of energy, national and global security, and environment.

Individual will conduct research and development in the areas of transportation security and transportation system planning and assessments - will help design, develop, and implement enterprise decision support systems. The individual will work with researchers in the Decision Engineering Group, Engineering Science and Technology Division, and across ORNL.

Qualifications:

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.

We are especially seeking individuals with strong background in the fields of operations research/system analysis, visualization of modeling and simulation results with special focus on network modeling and decision analysis and decision support.

- MS/PhD in operations research, systems engineering, engineering management, decision sciences, modeling and simulation, and computer science - or an equivalent combination of education and experience.
- Proficiency in CPLEX, Arena, and Matlab is a plus.
- Strong programming skills (.Net, C++, MS SQL Database tools, user interface development). Willingness to build expertise in enterprise IT issues
- Excellent communications skills and the ability to organize and work in an interdisciplinary research teams are required.
- Creativity and innovative thinking in developing solutions to complex problems.
- The candidate must have excellent writing skills for preparing reports, proposals, and publications/journal articles,

- The candidate must be a self-starter who knows how to learn and is interested in broadening his/her knowledge.

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 Decision Engineering Group, click on the following URL: <http://cta.ornl.gov/cta/>.

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

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 (ORNL08-14-ESTD).

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. citizens who currently work in the U.S and are available for interview, without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.