

# **Postdoctoral Research Associate in Computational Transportation Science**

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

ORNL10-28-CSED

### **Project Description:**

The Geographic Information Science and Technology (GIST) group is currently seeking a highly qualified candidate for one postgraduate research positions in the area of computational transportation science. Primary focus will be on developing large scale traffic simulation models and visualization that will enable analyzing large volumes of population movement. The work involves developing new traffic simulation models and/or using existing traffic simulation models to simulate the congested traffic on the urban or county level. The candidate should show initiative in investigating, creating and developing new algorithms and computational methods for project advancement. The successful candidate will be expected to be innovative and creative in the developing of new research ideas and to participate in the proposals development process for potential funding of research projects.

### **Qualifications:**

- Ph.D. in traffic engineering, geographic information science or computer science.
- Strong understanding of transportation science, engineering and computational science.
- Educational background, expertise, and demonstrated research experience in one or more of the following areas:
  1. Traffic simulations and theory.
  2. Transportation planning models.
  3. Communication models.
- Experience with transportation models. (VISSIM, TRANSIM or TRANSCAD)
- Programming skills in a language such as C, C++, Fortran90, Java, VB or various application languages is required. Knowledge of Matlab and/or “R”, and parallel computing are highly desirable.
- Candidates should have excellent communications skills, including a record of scientific publications, and a desire to work in an applied research environment.
- Applicants cannot have received the most recent degree more than five years prior to the date of application appointment and must complete all degree requirements before starting their appointment.

### **Technical Questions:**

Questions regarding the position can be directed to Budhendra Bhaduri at [bhaduribl@ornl.gov](mailto:bhaduribl@ornl.gov). Please include the requisition number and title when corresponding.

### **How to Apply:**

Qualified applicants must apply online at [https://www2.ornl.gov/ORNL\\_POST/](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>.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE). The program 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.