

SAP No. 50161409
July 2004

Postgraduate Research Position Intelligent Agents Computer Scientist

The Applied Software Engineering Research (ASER) Group in the Computational Sciences and Engineering Division (http://computing.ornl.gov/cse_home/index.shtml) at the Oak Ridge National Laboratory seeks highly qualified candidates for a postgraduate research position. The successful candidate will perform basic and applied research on intelligent agents, agent communication models, information retrieval, information integration, and semantic web concepts. The successful candidate must be flexible with regard to research assignments, able to collaborate with scientists and sponsors, and capable of producing significant research results.

ASER's mission is to develop advanced applied software technologies and other related technologies to support interdisciplinary researchers and decision makers in areas of importance to DOE, including scientific simulation and modeling, enterprise management, remote instrumentation, disaster management, and engineering design and management. The ASER staff work in small teams of researchers and software engineers to produce solid, high-quality, and reliable project deliverables. The staff has expertise in agent technology, XML, RDF, Java, software engineering. Projects include Virtual Information Processing Agent Research (VIPAR), Collaborative Management Environment (CME), Manufacturing Agent Based Emulation System (MABES), Supplier Utilization through Response Grouping Enterprises (SURGE), Hazard Prediction and Assessment Capability (HPAC), and Nuclear Fuel Cycle Analyzer (NFCA).

MAJOR DUTIES AND RESPONSIBILITIES: Responsibilities include the ability to work with intelligent agents, information integration, or knowledge discovery, and the ability to develop Java-based software in a team environment on advanced systems with specific assignments to:

- Explore future concepts in intelligent agents, agent communication models, information retrieval, information integration, and semantic web areas.
- Create prototype software to demonstrate new research concepts.
- Publish results at recognized conferences and in top journals in the field.
- Secure and increase funding for continued research.
- Collaborate with renowned experts.

EDUCATION, EXPERIENCE, AND SKILLS REQUIRED: Position requires an MS or PhD in computer science or computer engineering with extensive experience in developing intelligent agents, information integration, or knowledge discovery, and the ability to develop Java-based software in a team environment. Familiarity with software engineering processes and methodologies, FIPA standards, and agent frameworks is desired. Candidates should have excellent communications skills, including a record of scientific publications, and a desire to work in an applied research environment.

The successful candidate must demonstrate good communications and interpersonal skills, be a committed team player capable of working effectively with individuals or groups, be highly motivated, and be successful at working multiple tasks concurrently. Must have a proven track record of completing projects, including defining requirements, allocating resources, determining and tracking project schedules, programming, implementation, and customer service.

Qualified candidates are invited to send a current resume and a list of three or more references to: **Oak Ridge National Laboratory, P. O. Box 2008, Oak Ridge, TN 37831-6085** or E-mail: potokte@ornl.gov; Fax (865) 576-0003. **To be considered, candidates must be capable of obtaining and maintaining a DOE security clearance.**

Please reference the position title and number (ORNL04-17-CSED), when corresponding about this position.

This appointment will be offered through the ORNL Postdoctoral Research Associates Program (<http://www.ornl.gov/orise/edu/ornl/ornl-pd/ornlpdoc.htm>). Salaries will be competitive. The postdoctoral program is open to all qualified individuals without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.