ASSISTANT RESEARCH SCIENTIST

The ACIS laboratory of the University of Florida conducts fundamental and applied research on all aspects of systems that integrate computing and information processing. Current ACIS research falls under the following broad categories: Grid and cloud computing middleware, virtualization, cyberinfrastructure for e-science, autonomic computing, micro- and nanosystems, computer architecture and peer-to-peer computing. ACIS is home to approximately twenty-five faculty, students, researchers, technical staff and distinguished visitors and has extensive collaborations with other scientists and research organizations in the USA and abroad. ACIS research facilities include advanced hardware and software systems with unique state-of-the-art virtualization capabilities. ACIS lab facilities available to support the candidate’s research include more than 350 CPUs, 1.5 TB of memory and 180 TB of storage distributed across 10 clusters with 10 Gbps internal connections and both 1Gbps and 10 Gbps external connections. The University of Florida is a Land-Grant institution with an enrollment in excess of 43,000 students on the Gainesville campus and a member of the Association of American Universities.

DUTIES AND RESPONSIBILITIES: This is a 9-month non-tenure-accruing faculty position, available in the Advanced Computing and Information Systems Laboratory, Department of Electrical and Computer Engineering, University of Florida. The candidate will conduct research and teach on distributed and autonomic computing, and develop and manage cyberinfrastructure. The candidate will provide expertise in the evaluation, development, implementation, and deployment of specific Cloud Computing, Middleware, and Data Management technologies in conjunction with ACIS lab staff and collaborators. He/she will investigate research problems in distributed computing systems, develop software using software engineering best practices, publish peer-reviewed research articles in workshops, conferences and journals, evaluate existing technologies, supervise staff and graduate students, oversee development aspects of Cloud and Grid scientific cyberinfrastructure and application management, work with scientific users to develop Cloud and Grid systems and collaborate with key academic researchers and open source user communities including faculty, scientific researchers, and grant stakeholders. The candidate will teach and train students in his/her area of expertise, by conducting sessions, such as workshops and tutorials, as appropriate. The candidate will also be responsible for overseeing the development and integration of technical documentation and its dissemination to students and external users through collaborative Web-accessible systems such as Web Conferencing and Content Management Systems.

BASIC QUALIFICATIONS: A Ph.D. in computer engineering, computer science or a closely related field, with a strong background in distributed systems, machine learning, information retrieval, networking, security, and virtualization technologies, is required. Five or more years of practical experience are required involving all of the following: cloud systems design, virtual machine management, distributed file systems, and management of structured and unstructured data. Evidence of research work should be supported by peer-reviewed journal publications and papers at international conferences, review of scientific articles, and original software products on all of the following topics: a) Grid and Cloud computing; b) virtual networking; c) distributed data systems; d) machine learning; e) collaborative Web systems; and f) secure Internet services. Evidence of development and management of production-quality software systems based on
research ideas, inter-disciplinary work and ability to adapt to and integrate new technology should be supported by activities in the last 5 years involving all of the following: Grid/Cloud distributed systems, including Web Services, distributed file systems, databases and Web applications on Unix/Linux/Mac OS X and/or Windows used by other scientists; integration of heterogeneous databases such as MySQL, SQL Server and PostgreSQL; the use of standard software engineering practices (including the use of software design tools, development environments, source code management systems, build-and-test systems, and documentation tools); batch systems and workflow engines (such as Apache Hadoop) on clouds (such as Amazon Web Services, and Science Clouds); development of machine learning algorithms; and the use of virtualization technologies such as VMware, Xen and Hyper-V.

**HOW TO APPLY:** Interested persons are requested to submit the following items via online at [https://jobs.ufl.edu/applicants/jsp/shared/Welcome_css.jsp](https://jobs.ufl.edu/applicants/jsp/shared/Welcome_css.jsp): Requisition # 0808886 (1) letter of application and curriculum vita; (2) statement of research interests and career goals; (3) official copies of university transcripts; (4) three letters of recommendation from individuals familiar with the candidate’s research ability, and (5) copies of one to three of the candidate’s most significant publications. All of the above items must be submitted by midnight, September 11, 2011. Nomination of candidates is encouraged. *Women and minorities are encouraged to apply.*

**Salary:** COMMENSURATE WITH QUALIFICATIONS AND EXPERIENCE