POSTDOCTORAL RESEARCH ASSOCIATE

Joint postdoctoral researchers for NCSA/Cyprus Institute

NCSA at the University of Illinois at Urbana-Champaign, and the <u>Cyprus Institute</u> (CyI), invite applications for postdoctoral research associate(s) (<u>www.ncsa.illinois.edu/about/jobs/pra_cyi</u>) in the fields of compute and data-intensive applications in the thematic areas of focus at the <u>Computation-based Science and Technology Research Center</u> (CaSToRC), namely physical sciences (high energy particle physics and physical chemistry), climate modeling, computational biology, imaging, inverse problems visualization and digital cultural heritage. The positions are shared between NCSA and the CyI.

NCSA provides supercomputing and advanced digital resources for the nation's science enterprise. Faculty, staff, students, and collaborators from around the globe use NCSA's advanced digital resources to address research grand challenges for the benefit of science and society. NCSA has been advancing one third of the Fortune 50® for more than 30 years by bringing industry, researchers and students together to solve grand challenges at rapid speed and scale.

The Cyl is an international research and innovation institution based in Cyprus. It is a non-profit science and technology research and post-graduate education organization focusing on regional and inter-regional challenges of global significance. Led by an acclaimed Board of Trustees and partnered with leading international research institutions, the Cyl is world-class in its standards and global in its membership. The Cyl is a public benefit organization and welcomes students, faculty and staff of all nations, cultures, races and faiths. The research aims of the Cyl are represented by three research centers: the Computation-Based Science and Technology Research Center (CaSToRC), the Energy, Environment and Water Research Center (EEWRC) and the Science and Technology in Archaeology Research Center (STARC).

KEY RESPONSIBILITIES

The successful candidate(s) will work at the Cyl and NCSA with a focus on:

- Carrying out common research activities between NCSA and CaSToRC in the fields of focus.
- Developing new algorithms and codes for current and future supercomputers in the area of focus.
- Helping research teams to adapt new computational and data approaches to the application area of focus.

- Publishing research results.
- Developing tutorials and carrying out training of users.

REQUIRED EDUCATION AND EXPERIENCE

- PhD degree in computational physics, chemistry, biology, engineering, applied mathematics, or any other field of computational sciences, or related fields.
- Analytical problem-solving ability.
- Strong verbal and written communication skills.
- Good interpersonal and teamwork skills.

PREFERRED EXPERIENCE

- Research experience in the scientific areas of interest to CaSToRC and NCSA.
- Experience in high performance computing.
- Experience in parallel programming with C, C++, Python or other programming languages.
- Experience in the development of data-intensive scientific applications.
- Expertise in curation of large data sets.
- Knowledge of CUDA or OpenCL programming.
- Knowledge of FPGA-based hardware development tools and techniques.

The appointment will be for a fixed term of two years with the possibility of extension. The rank and salary range will be commensurate with the experience and qualifications of the candidate.

For full consideration, interested applicants should send their application materials (cover letter, curriculum vitae, research statement, links to recent publications, names/contact information of three references to postdoc-search@ncsa.illinois.edu and include "Cyprus-NCSA Joint Postdoc Application" in the subject line before the close date, **June 30, 2018**. Interviews and hires may take place prior to the closing date and early applications are encouraged; however, full consideration will be given to complete applications received by the closing date. For further information regarding application procedures, contact Amanda Lombardo, alombar@illinois.edu. Illinois is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, age, status as a protected veteran, or status as a qualified individual with a disability. Illinois welcomes individuals with diverse backgrounds, experiences, and ideas who embrace and value diversity and inclusivity.

Visit www.inclusiveillinois.illinois.edu.

For further information regarding our application procedures, you may visit <u>www.ncsa.illinois.edu</u> or email <u>NCSA-HR@illinois.edu</u>.

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