NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

About NCSA

MORE INFO

UNIVERSITY OF ILLINOIS ⬀

URBANA-CHAMPAIGN ⬀

BENEFITS ⬀

EMPLOYMENT VERIFICATION ⬀

DIVERSITY STATEMENT

POSTDOC PROGRAM

UNDERGRAD INTERNSHIPS ⬀

GET NOTIFIED

Find out when NCSA opens new positions by *joining our mailing list*.

(You may unsubscribe from the list as well.)

HOW DO I APPLY?

Create a user name and password in HireTouch. HireTouch and a complete list of career opportunities available on the Champaign-Urbana campus can be found at *jobs.illinois.edu*.

WHAT IS AN ACADEMIC PROFESSIONAL?

Academic Professionals **(APs) are salaried employees whose positions meet specialized administrative, professional, or technical needs. These positions have been exempted from the**

POSTDOCTORAL FELLOW

Deep Learning Project

The National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign provides supercomputing and advanced digital resources for the nation's science enterprise. At NCSA, University of Illinois faculty, staff, students, and collaborators from around the globe use 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.

NCSA invites applications for a postdoctoral fellow position in the field of deep learning. The successful candidate is expected to contribute to the development of system and software in support of a newly awarded National Science Foundation (NSF) grant to develop a computational instrument for deep learning research.

KEY RESPONSIBILITIES

The successful candidate will work at NCSA with a main focus on the development and implementation of deep learning frameworks and network training models on a multi-GPU multi-node system. He/she will be primarily engaged in the following activities:

- Extending state-of-the art in the area of deep learning systems and architectures;

- Adaptation of the existing and development of new deep learning frameworks;

- Development of the middleware and application-level software for deep learning;

- Development of web-based interfaces to deep learning frameworks;

- Gathering application requirements and ensuring the developed software meets these requirements;

- Helping research teams to adapt deep learning frameworks to their application areas in particular in thematic areas of interest to NCSA;
- Publishing research results;
- Developing tutorials and carrying out training of new users.

REQUIRED EDUCATION AND EXPERIENCE

- PhD degree in computer science, computer engineering, computational sciences, or related fields;
- Experience in deep neural networks (CNN, RNN, BNN);
- Experience in deep learning methodology (unsupervised learning, reinforcement learning, network reduction);
- Experience in deep neural network optimization and acceleration;
- Experience in C/C++/Python programming;
- Analytical problem solving ability;
- Strong verbal and written communication skills;
- Good interpersonal and teamwork skills.

PREFERRED EXPERIENCE

- Experience in high performance computing;
- Experience in the development of data-intensive scientific applications;
- Knowledge of CUDA or OpenCL programming;
- Knowledge of FPGA-based hardware development tools and techniques;
- Familiar with Caffe, TensorFlow, or other frameworks.

The appointment will be for a fixed term of two years with the possibility of extension for another year. 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 3 references) to postdoc-search@ncsa.illinois.edu and include "NCSA Postdoc Application in Deep Learning" in the subject line. 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, **December 30, 2017**. For further information regarding position requirements and application procedures, contact Volodymyr Kindratenko at kindrtnk@illinois.edu or +1 (217) 265-0209.

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 www.ncsa.illinois.edu or email NCSA-HR@illinois.edu.