

30th IEEE INTERNATIONAL Parallel and Distributed Processing SYMPOSIUM

MAY 23-27, 2016
CHICAGO HYATT REGENCY
CHICAGO, ILLINOIS USA



IPDPS 2016 will be held in Chicago, the third largest metropolis in the USA. It boasts a dual-hub airport system and 46 non-stop global flights daily. Situated along the shoreline of Lake Michigan, downtown Chicago (aka the Loop), where the Hyatt Regency is located, is an easy walk or cab ride to the attractions the city offers, including parks, beaches, shopping, museums, live entertainment, and the singular international cuisine of Chicago's diverse ethnic neighborhood eateries. Check the IPDPS Web pages for updates and information on workshops, the PhD Forum, and other events as the full program develops.

CALL FOR PAPERS

Authors are invited to submit manuscripts that present original unpublished research in all areas of parallel and distributed processing, including the development of experimental or commercial systems. Work focusing on emerging technologies is especially welcome. Topics of interest include:

- **Parallel and distributed algorithms**, focusing on topics such as: numerical, combinatorial, and data-intensive parallel algorithms, locality-aware and power-aware parallel algorithms, streaming algorithms, parallel algorithms in specific domains such as machine learning and network science, scalability of algorithms and data structures for parallel and distributed systems, communication and synchronization protocols, network algorithms, scheduling, and load balancing.
- **Applications of parallel and distributed computing**, including computational and data-enabled science and engineering, big data applications, parallel crowd sourcing, large-scale social network analysis, management of big data, cloud and grid computing, scientific, biological and medical applications, and mobile computing. Papers focusing on applications using novel commercial or research architectures, big data approaches, or discussing scalability toward the exascale level are encouraged.
- **Parallel and distributed architectures**, including architectures for instruction-level and thread-level parallelism; petascale and exascale systems designs; novel big data architectures; special purpose architectures, including graphics processors, signal processors, network processors, media accelerators, and other special purpose processors and accelerators; impact of technology on architecture; network and interconnect architectures; parallel I/O and storage systems; architecture of the memory hierarchy; power-efficient and green computing architectures; dependable architectures; and performance modeling and evaluation.
- **Parallel and distributed software**, including parallel and multicore programming languages and compilers, runtime systems, operating systems, resource management including green computing, middleware for grids, clouds, and data centers, libraries, performance modeling and evaluation, parallel programming paradigms, and programming environments and tools. Papers focusing on novel software systems for big data and exascale systems are encouraged.

WHAT/WHERE TO SUBMIT

Authors will need to register their paper and submit an abstract by October 9, 2015 and then submit full versions by October 16, 2015. More details on submissions and instructions for submitting files are available at www.ipdps.org. All submitted manuscripts will be reviewed. Submitted papers should NOT have appeared in or be under consideration for another conference, workshop or journal.

GENERAL CHAIR

Xian-He Sun
(Illinois Institute of Technology, USA)

PROGRAM CHAIR

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(University of Maryland, USA)

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- **Algorithms:**
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- **Architecture:**
Andrew A. Chien
(University of Chicago, USA) &
Hank Hoffman
(University of Chicago, USA)
- **Software:**
Karen Karavanic
(Portland State University, USA)

KEYNOTES & TECHNICAL SESSIONS

WORKSHOPS & PHD FORUM

COMMERCIAL PARTICIPATION

Details at www.ipdps.org

IMPORTANT DATES

August 15, 2015

Proposals for New Workshops

October 9, 2015

Submit Abstract

October 16, 2015

Submit Paper

December 18, 2015

Author Notification

After

December 18, 2015

Deadlines for Paper

Submissions to Workshops

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