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IPDPS 2015 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Authors are invited to submit manuscripts that present original unpublished research in all areas of parallel and distributed processing, including the development of experimental or commercial systems.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, but are not limited to:

- **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.

BEST PAPERS AWARDS

The program committee will nominate papers for recognition in several categories including the four conference topic areas and will consider other paper attributes that merit recognition from the conference.

WHAT/WHERE TO SUBMIT

See the IPDPS Website for details. IPDPS 2015 will require submission of abstracts and registration of papers one week before the paper submission deadline without any late exceptions. All submitted manuscripts will be reviewed. Submitted papers should NOT have appeared in or be under consideration for another conference, workshop or journal. Questions may be sent to PC2015@ipdps.org.

IMPORTANT DATES

• Abstracts due	October 10, 2014
• Submissions due	October 17, 2014
• Author notification	December 12, 2014
• Camera-ready due	February 2, 2015

IPDPS 2015 will be held in Hyderabad, India, a city that offers a variety of tourist attractions ranging from heritage monuments, lakes and parks, and gardens and museums to a richly mixed cultural and historical tradition spanning more than 2000 years. Modern development has made it the center of new technologies; it is sometimes called Genome Valley and Cyberabad to reflect the biotechnology and IT investments and industrial parks.

