The 6th International Workshop on Parallel and Distributed Computing for Large Scale Machine Learning and Big Data Analytics

May 29, 2017

http://parlearning.ecs.fullerton.edu

In Conjunction with

31st IEEE International Parallel & Distributed Processing Symposium May 29-June 2, 2017 Buena Vista Palace Hotel Orlando, Florida USA

CALL FOR PAPERS

Scaling up machine-learning (ML), data mining (DM) and reasoning algorithms from Artificial Intelligence (AI) for massive datasets is a major technical challenge in the time of "Big Data". The past ten years have seen the rise of multi-core and GPU based computing. In parallel and distributed computing, several frameworks such as OpenMP, OpenCL, and Spark continue to facilitate scaling up ML/DM/AI algorithms using higher levels of abstraction. We invite novel works that advance the trio-fields of ML/DM/AI through development of scalable algorithms or computing frameworks. Ideal submissions would be characterized as scaling up X on Y, where potential choices for X and Y are provided below.

Scaling up

- recommender systems,
- gradient descent algorithms
- deep learning
- sampling/sketching techniques
- clustering (agglomerative techniques, graph clustering, clustering heterogeneous data)
- classification (SVM and other classifiers), SVD
- probabilistic inference (bayesian networks)
- logical reasoning
- graph algorithms and graph mining

On

- Multi-core architectures/frameworks (OpenMP)
- Many-core (GPU) architectures/frameworks (OpenCL, OpenACC, CUDA, Intel TBB)
- Distributed systems/frameworks (GraphLab, MPI, Hadoop, Spark, Storm, Mahout, etc.)

IMPORTANT DATES

- Paper submission: January 13, 2017 AoE
- Notification: February 10, 2017
- Camera Ready: March 10, 2017

PAPER GUIDELINES

Submitted manuscripts should be upto **10** single-spaced double-column pages using 10-point size font on 8.5x11 inch pages (IEEE conference style), including figures, tables, and references. Format requirements are posted on the IEEE IPDPS web page (www.ipdps.org).

Journal publication: Selected papers will be published in a Special Issue of *Future Generation Computer Systems*, Elsevier's International Journal of eScience. Special Issue papers will undergo additional review.

TRAVEL AWARDS

Students with accepted papers can apply for a travel award. Please find details at www.ipdps.org.

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