

IEEE GlobalSIP'16-Call for Papers

IEEE Global Conference on Signal and Information Processing – Washington D.C.
Symposium on Distributed Optimization and Resource Management over Networks.

General Chair: Zhi-Quan Luo

Technical Program Chairs: Necdet Serhat Aybat, Mingyi Hong and Qing Ling

With the rapid advances in sensing, communication, and storage technologies, distributed data acquisition is now ubiquitous in many areas of engineering, biological, and social sciences. For example, the large-scale implementation of advanced metering systems in the smart grids enables real time collection of a huge amount of distributed data (voltages, phases, etc), the understanding of which is critical in improving the overall performance of the future power systems. More examples of distributed data include high-resolution videos from a network of surveillance systems, interactions on a social network, environmental data from sensor networks. Timely and effectively processing of such large amount of distributed, and possibly corrupted and/or online data requires not only novel data processing techniques, but also a deep understanding of the underlying network properties of physical systems, including the network topology, the processing capability of each distributed node, the nature of the data, etc. These sophisticated characteristics bring new challenges for the design and analysis of optimization and resource management algorithms. This symposium aims to bring together researchers and experts in the fields of signal processing, control, optimization, network sciences, cyber-physical systems to address the emerging challenges related to this topic. Emphasis will be given to theories and applications for distributed signal processing systems, cyber-physical systems as well as advanced distributed control and optimization techniques.

Topics of interest include (but are not limited to):

- Machine learning over networks and graphs
 - Signal processing over networks and graphs
 - Distributed optimization for signal processing
 - Distributed optimization for communication systems
 - Distributed optimization for cyber physical systems
 - Distributed control over networked systems
 - Distributed resource management over networks
 - Nonconvex optimization methods over networks
 - Robust and stochastic optimization methods over networks
 - Privacy preservation in distributed algorithms
 - Asynchronous coordination schemes
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Submission of Papers: Prospective authors are invited to submit full-length papers, with up to four pages for technical content including figures and possible references, and with one additional optional 5th page containing only references. Manuscripts should be original (not submitted/published anywhere else) and written in accordance with the standard IEEE double-column paper template. A selection of best papers and best student papers will be made by the GlobalSIP 2016 best paper award committee upon recommendations from the Technical Committee.

Notice: The IEEE Signal Processing Society enforces a "no-show" policy. Any accepted paper included in the final program is expected to have at least one author or qualified proxy attend and present the paper at the conference. Authors of the accepted papers included in the final program who do not attend the conference will be subscribed to a "No-Show List", compiled by the Society. The "no-show" papers will not be published by IEEE on IEEEExplore or other public access forums, but these papers will be distributed as part of the on-site electronic proceedings and the copyright of these papers will belong to the IEEE.

Timeline for paper submission:

June 5, 2016: Paper submission deadline

August 5, 2016: Review results announced

September 6, 2016: Camera-ready papers due

For inquiries and questions please contact the Symposium Chairs: Necdet Serhat Aybat (nsa10@engr.psu.edu), Mingyi Hong(mingyi@iastate.edu), Qing Ling (qingling@mail.ustc.edu.cn) or Zhi-Quan Luo (luozq@umn.edu).
