

2nd Symposium on Tensor Methods for Signal Processing and Machine Learning

Call for Papers

General Chairs:

X. Fu, Oregon State University
P. Markopoulos, Rochester Institute of Technology
E. Papalexakis, University of California Riverside

Technical Program Chairs:

F. Ahmad, Temple University
R. Boyer, University of Lille
A. L. F. de Almeida, Federal University of Ceará, Brazil
K. Huang, University of Florida
D. A. Pados, Florida Atlantic University

Tensor methods have been attracting increasing documented interest over the past decade, finding a plethora of important signal processing, data analysis, and machine learning applications. Tensors have been extensively employed in several research areas such as computer vision, communications, array processing, network analysis, data mining, and deep learning, among others. The wide success of tensor methods can be attributed to their inherent ability to better model, analyze, predict, recognize, and learn from multi-modal data. This symposium wishes to serve as a global forum for researchers to meet, exchange ideas, and present new theoretical and algorithmic findings related to tensor methods. Based on broad signal processing and machine learning foundations, this symposium aspires to foster interdisciplinary discussions and bring together researchers from both academia and the industry.

Topics of interest include, but are not limited to:

- Theory and algorithm advances in multi-linear algebra
- Scalable, distributed, randomized algorithms for tensor decomposition
- Multimodal data, fusion, and joint processing
- Methods for robust tensor processing with faulty and/or missing data
- Incremental/online algorithms for tensor processing
- Machine learning with tensor formulations
- Tensor methods in neural networks and deep learning
- Application of tensor methods in data mining
- Tensor based computer vision and image processing
- Tensor processing and analysis in social networks and economics
- Applications of tensor processing in wireless communications and sensor networks
- Tensor developments in chemometrics
- Tensor methods in neuroscience and medicine
- Tensor applications in multi-spectral imaging
- Applications of tensor processing in medical imaging

Paper submission: Prospective authors are invited to submit full-length papers (up to 4 pages for technical content including figures and possible references, and with one additional optional 5th page containing only references) and extended abstracts (up to 2 pages, for paper-less industry presentations and Ongoing Work presentations) via the IEEE GlobalSIP 2019 conference website. Manuscripts should be original (not submitted/published anywhere else) and written in accordance with the standard IEEE double-column paper template. The accepted abstracts will not be indexed in IEEE Xplore, however the abstracts and/or the presentations will be included in the IEEE SPS SigPort. Accepted papers and abstracts will be scheduled in lecture and poster sessions. A limited number of papers published recently in SPS journals can also be accommodated for presentation — as with the technical abstracts will not be (re-)published (please contact the organizers).

Important dates:

- June 27, 2019: Paper submission due
- Aug. 7, 2019: Notification of acceptance
- Aug. 22, 2019: Camera-ready paper due

For inquiries please contact: X. Fu (xiao.fu@oregonstate.edu), P. Markopoulos (panos@rit.edu), E. Papalexakis (epapalex@cs.ucr.edu), F. Ahmad (fauzia.ahmad@temple.edu), A. L. F. de Almeida (andre@gtel.ufc.br), K. Huang (kejun.huang@ufl.edu), D. Pados (dpados@fau.edu).