# GlobalSIP 2013

IEEE Global Conference on Signal and Information Processing

# Advancing Neural Engineering Through Big Data

www.ieeeglobalsip.org/sym/13/ANEBD

December 3-5, 2013 • Austin, Texas, U.S.A.

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## **Call for Papers**

The past two decades have seen an explosion in Neural Engineering research dedicated to interfacing the nervous system to the external world. Research in this area has been motivated by the promise of treatments for elusive medical conditions ranging from blindness to chronic pain to spinal cord injury, and has been supported by a sustained campaign from a spectrum of federal funding agencies. Overall progress in the field has been limited by the lack of large, comprehensive data resources. The purpose of this symposium is to focus the attention of the research community on a progression of neural engineering research questions and to generate and curate massive data sets to be used in addressing those questions. The existence of massive common data corpora has proven to substantially accelerate research progress. In this symposium, we will explore the community needs for such massive data and discuss models for the funding, development and distribution of these resources.

Topics of interest include:

- Brain Computer Interfaces
- Wearable and Assistive devices
- Neurological Sensor Arrays and Transduction
- Biocompatible Interface Materials
- Bioelectrical Signal Processing
- Neuromotor and Neurosensory Modeling
- Bioengineering Application of Big Data
- Best Practices in Experimental Design
- Annotation and Distribution Standards
- Benchmarks and Open Source Tools

#### **Paper Submission**

Paper submission will be online only through the GlobalSIP 2013 website. Papers should be in IEEE two-column format and no longer than 4 pages.

#### Symposia Website

Full details, new updates, and submission instructions can be found on the symposia website, http://www.ieeeglobalsip.org/sym/13/ANEBD

#### **Important Dates**

Paper Submission Deadline June 15, 2013
Review Results Announce July 30, 2013
Camera-Ready Papers Due September 7, 2013



IEEE Signal Processing Society 4//1' ®