



IEEE Workshop on Signal Processing Systems (SiPS) is a major international forum for discussion of new technology progress and innovations in the design and implementation of signal processing systems. The focus is on emerging state-of-the-art signal processing systems (Cloud/Multimedia/Communications/Biosystems) and cutting-edge design platforms (VLSI/SoC/FPGA/Multicore/GPU) for current and future challenges in research and development. Proceedings will be published electronically and will be accessible on the IEEE Xplore Digital library. Prospective authors are invited to submit manuscripts on topics including, but not limited to:

**Honorary Chair****Liang-Gee Chen**

National Taiwan University / NARL, Taiwan

**General Chairs****An-Yeu (Andy) Wu**

National Taiwan University, Taiwan

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Germany**Xiaoyang Zeng**

Fudan University, China

**■ Optimization of Signal Processing Algorithms and Architectures**

- Dataflow-based design and methodology
- Optimization of signal processing algorithms
- Compilers and tools for signal processing system design
- Algorithm transformation and algorithm-to-architecture mapping

**■ Software Based Design and Implementation of Signal Processing Systems**

- Low-power software techniques for green systems
- Programmable digital signal processor architecture and systems
- Application specific instruction-set processor (ASIP) architecture and systems
- SIMD, VLIW, and multi-core CPU architecture and systems
- Graphic processing unit (GPU) based massively parallel implementation

**■ VLSI Based Design and Implementation of Signal Processing Systems**

- Low-power signal processing circuits and applications
- High performance VLSI systems
- FPGA and reconfigurable architecture based systems
- System-on-chip and network-on-chip

**■ Signal Processing Application Systems**

- Environmental awareness signal processing application systems
- Biomedical signal processing and biosystems
- Image, video, audio, speech and multimedia signal processing
- Information forensics, security and cryptography
- Communications and networking
- Machine learning for signal processing
- Sensing and sensor signal processing

**Paper Submission:**

Authors are invited to submit full-length (6 pages maximum), original, unpublished papers. Previously published papers or papers currently under review for other conferences/journals should not be submitted and will not be considered. Paper format information is available on the SiPS 2013 website

<http://www.sips2013.org>

**Conference Theme:**

In 2013, SiPS's special theme is on "**Signal Processing Systems for a Green Society.**" Enabling green technologies through innovative signal processing and VLSI design is important for bringing earth friendly systems and applications to build a green society. Submissions that can fall into this broad inter-disciplinary area are particularly encouraged.

**Student Paper Contest and Special Issue:**

There will be a contest for best student papers, and selected papers will be considered for publication in a special issue of the Journal of Signal Processing Systems.

**Paper Submission Deadline** !!!  
**EXTENDED to April 28, 2013**

**Paper Submission Deadline:**  
**April 19, 2013**

**Acceptance Notification:**  
**June 28, 2013**

**Camera Ready Paper Due:**  
**July 26, 2013**

