IEEE SiPS 2019

IEEE Workshop on Signal Processing Systems

20-23 October 2019, Nanjing, China

Advanced Signal Processing for Smart Learning and Implementation

CALL FOR PAPERS

The IEEE Workshop on Signal Processing Systems (SiPS) is a premier international forum in the area of design and implementation of signal processing systems. This is the first time SiPS takes place in Nanjing, China, featuring a comprehensive program including technical workshops, tutorials, demonstrations, and exhibitions.

PAPER SUBMISSION

We invite you to submit 6-page (max.) original papers in areas including, but not limited to:

- **Software Implementation of Signal Processing Systems**
  - Software on programmable digital signal processors
  - Application-specific instruction-set processor (ASIP) architectures and systems
  - SIMD, VLIW and multi-core CPU architectures
  - GPU-based massively parallel implementations
- **Hardware 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
  - VLSI for sensor network and RF identification systems
- **Machine Learning for Signal Processing**
  - Circuits and systems for AI
  - Deep learning/machine learning/AI algorithms
  - Tools/platforms for AI
  - Edge and cloud AI computing platforms
  - Hardware/neuromorphic accelerators
  - Hardware/software co-design and automation for AI
- **Design Methods of Signal Processing Systems**
  - Optimization of signal processing algorithms
  - Compilers and tools for signal processing systems
  - Algorithm-to-architecture transformation
  - Dataflow-based design methodologies
  - Error-tolerant techniques for signal processing
- **Signal Processing Application Systems**
  - Audio, speech, and language processing
  - Biomedical signal processing and bioinformatics
  - Image, video, and multimedia signal processing
  - Information forensics, security, and cryptography
  - Sensing and sensor signal processing
  - Signal processing for non-volatile memory systems
  - Latency- and power-constrained signal processing
  - Wireless communications and MIMO systems
  - Coding and compression
  - Signal processing for mixed-signal technologies
- **Emerging Technologies**
  - Vehicular ad hoc networks (VANET)
  - Internet of Things (IoT)
  - Bio-inspired networks
  - Implantable communications
  - Tele-medicine/e-health networks

IMPORTANT DEADLINES

Technical Papers
~~**15 April 2019**~~ **15 May 2019**

Special Session Proposals
15 May 2019

Tutorial Proposals
15 April 2019

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