IEEE SiPS 2020

IEEE Workshop on Signal Processing Systems
20-22nd October 2020, Coimbra, Portugal

Towards Intelligent and Energy-Efficient Signal Processing Systems

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 Coimbra, Portugal, featuring a comprehensive program, including technical workshops, tutorials, demonstrations and exhibitions.

SUBMITTING A PAPER

We invite prospective authors 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
  - Processing-in-memory signal processing 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

IMPORTANT DEADLINES

Technical Papers	**1st April 2020**
Special Session Proposal	**1st April 2020**
Tutorial Proposals	**1st April 2020**

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