

IEEE SiPS 2020

IEEE Workshop on Signal Processing Systems
20-22nd Oct 2020, Coimbra, Portugal (virtual)

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. IEEE SiPS will be run virtually from Coimbra, Portugal, featuring a comprehensive program, including technical papers, special sessions, tutorials and a PhD forum.

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	May 15th May 31 st 2020
Special Session Proposal	May 15th May 31 st 2020
Tutorial Proposals	May 15th May 31 st 2020

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