The 37th IEEE Workshop on Signal Processing Systems (SiPS) is a premier international forum in the area of design and implementation of signal processing systems. It addresses all aspects of architecture and design methods of these systems. Emphasis is on current and future challenges in research and development in both academia and industry.

Submitting a Paper
We invite prospective authors to submit original papers (up to 6 pages) 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
- Quantum signal processing
- Processing-in-memory signal processing systems

**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

**Machine Learning for Signal Processing**
- Circuits and systems for AI
- Deep learning/machine learning/Al algorithms
- Tools/platforms for AI
- Transfer learning
- Distributed/federated learning
- Hardware/neuromorphic accelerators
- Hardware/software co-design and automation for AI

**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 Dates**

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**Committee**

**General Chairs**
John McAllister, QUB
Joe Cavallaro, Rice

**Program Chairs**
Jari Nurmi, Tampere Univ.
Jani Boutellier, Univ. of Vaasa

**Finance Chair**
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