Special Issue

Advancements in Digital Signal Processing: Emerging Applications and Optimized Implementations

Message from the Guest Editor

For real-time implementations of such modern DSP applications, an efficient optimization of such algorithms and architectures for an efficient VLSI implementation is often a critical and challenging issue. For example, real-time multimedia applications have increasingly greater performance requirements due to data processing and transmission of huge data volumes at high speeds, with resource constraints specific to portable devices. This Special Issue focuses on papers that demonstrate how these design challenges can be overcome using innovative solutions. Topics of interest for this Special Issue include, but are not limited to, the following:

- VLSI signal processing;
- Signal processing methods for efficient implementation;
- Optimization of the VLSI implementation of multimedia blocks;
- Low-power circuits and systems for DSP applications;
- Efficient adaptive/learning algorithms (low complexity/fast versions, optimized parameters, etc.);
- Tensor-based signal processing (efficient decomposition methods, low-rank approximations, etc.);
- Sparsity-aware algorithms.

Guest Editor

Prof. Dr. Doru Florin Chiper

Faculty of Electronics, Telecommunications and Information Technology, Gheorghe Asachi Technical University of Iaşi, 700506 Iaşi, Romania

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Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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