Special Issue

Recent Applications of Field-Programmable Gate Arrays (FPGAs)

Message from the Guest Editors

There has been an emerging interest in field-programmable logic device technology in recent years. The flexibility and logic capacity offered by modern FPGA devices make them a convenient platform for implementing various kinds of functionalities and a core element in various systems. Fast prototyping and a short “production” time are also factors that are often crucial in today's environment. The aim of this Special Issue is to present recent research results, trends, developments, and achievements related to FPGAs. The research published may cover (but is not limited to) the following areas:

- Synthesis and implementation methodsexploiting device-specific architecture elements, hard macros, and IP cores.
- Design methodologies.
- Verification and validation techniques, including formal verification methods.
- Optimization techniques (e.g., power, area, delay).
- Performance evaluation.
- The implementation of intelligent algorithms directly in hardware.
- AI/ML on FPGAs.
- Hardware architectures for 5G/6G networks.
- Reconfigurable architectures, including reconfigurable control systems.
- Dependable systems (cryptology, security algorithms, security aspects).
- Non-trivial applications

Guest Editors

Dr. Miroslaw Chmiel

Department of Digital Systems, Silesian University of Technology, Akademicka 16 St., 44-100 Gliwice, Poland

Prof. Dr. Paris Kitsos

1. Electrical and Computer Engineering Department, University of Patras, 26504 Patras, Greece
2. Electrical and Computers Engineering Department, University of the Peloponnese, 22131 Patras, Greece

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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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