Special Issue

Advances in Computer Architecture Design, Parallel Processing, and Fault Tolerance

Message from the Guest Editors

The advances in computer architectures and systems play a key role in supporting and boosting the development and deployment of complex applications in several domains, including machine learning and high-performance scientific computing. This Special Issue aims to disseminate relevant contributions to modern and emerging designs and techniques in computer architecture and parallel processing. The primary focus is on original and pertinent methodologies, techniques, and architectures in hardware accelerators for machine learning, processor architectures, and systems. Topics include enhancements in energy efficiency, performance, and fault tolerance. Additionally, this Special Issue aims to address the evaluation of reliability in emerging and novel computer architectures and systems. The primary scope of this Special Issue includes, but is not limited to:

- Parallel architectures;
- Emerging architectures for hardware accelerators;
- Design and programming of large language model (LLM) accelerators;
- Reliability and fault tolerance;
- Graphics processing units;
- Vector processors and accelerators;
- High-performance computing.

Guest Editors

Dr. Josie Esteban Rodriguez Condia

Dr. José Rodrigo Azambuja

Prof. Dr. Vicent Botti

Dr. Arcangelo Castiglione

Deadline for manuscript submissions

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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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