Special Issue

Algorithms in Reconfigurable Computing

Message from the Guest Editors

Reconfigurable Computing has emerged as a low cost, high-performance computing platform able to execute algorithms in many application domains faster than other computing platforms, like CPU-based systems. Its reconfigurability allows the design and implementation of circuits following the most appropriate computing paradigm for a particular algorithm. This Special Issue aims to collect recent innovations to deploy algorithms in reconfigurable computing. Potential topics include, but are not limited to:

- Mapping algorithms in FPGA with high-level synthesis;
- Template-based reconfigurable architectures for particular domains of algorithms;
- FPGA accelerators for algorithms;
- Algorithm optimization with arbitrary-precision data types;
- Algorithms in coarse-grained reconfigurable architectures;
- Design methodologies to map algorithms on reconfigurable computing devices;
- Design of data-centric algorithms with reconfigurable computing;
- Reconfigurable embedded devices for algorithms applied to health, smart-home, etc;
- Design of algorithms in high-performance reconfigurable computing platforms;
- Designing algorithms in SoC (System-on-Chip) FPGAs.

Guest Editors

Prof. Dr. Mário Véstias

Department of Electronics, Telecommunications and Computer Engineering, Polytechnic of Lisbon, 1500-310 Lisbon, Portugal

Dr. Paulo Flores

INESC-ID, Instituto Superior Técnico (ECE Department), University of Lisbon, Lisbon, Portugal

Deadline for manuscript submissions

closed (15 March 2023)

Algorithms

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 4.5

mdpi.com/si/66927

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

mdpi.com/journal/algorithms

Algorithms

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 4.5

mdpi.com/journal/algorithms

MDPI

About the Journal

Message from the Editor-in-Chief

Algorithms are the very core of Computer Science. The whole area has been considered from quite different perspectives, having led to the development of many sub-communities: Complexity theory (limitations), approximation or parameterized algorithms (types of problems), geometric algorithms (subject area), metaheuristics, algorithm engineering, medical imaging (applications), indicates the range of perspectives. Our journal welcomes submissions written from any of these perspectives, so that it may become a forum for exchange of ideas between the corresponding scientific subcommunities.

Editor-in-Chief

Prof. Dr. Frank Werner
Faculty of Mathematics, Otto-von-Guericke-University, P.O. Box 4120, D-39016 Magdeburg, Germany

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Ei Compendex, and other databases.

Journal Rank:

JCR - Q2 (Computer Science, Theory and Methods) / CiteScore - Q1 (Numerical Analysis)