

Special Issue

Parallel and Distributed Algorithms for Demanding Data Analysis and Applications

Message from the Guest Editor

The emerging digitalization of physical systems and applications brings new requirements for parallel and distributed algorithms, as well as for their data structures. The domains span industrial systems, vehicular networks, electricity grids, health-support systems and more, while applications are numerous, including continuous monitoring, stream processing, continuous optimization, resource management, and matching, distributed, and parallel learning and more. The challenges stem from varying data rates, from application demands for latency, throughput, scalability, robustness and consistency, from needs to exploit data locality in applications that are naturally distributed, as well as from expectations to exploit the possibilities offered by hardware diversity in deployable processing devices, ranging from embedded devices to high-end servers, possibly featuring new primitives. The aim of this Special Issue is to seek new approaches and to collect a set of high-quality novel contributions of relevance to these areas and associated aspects of large-scale data processing and analysis, for demanding problems, systems, and applications.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Algorithms are the core of computational mathematics and computer science. The whole area has been considered from different perspectives, which has led to the development of several sub-communities. The aim is to bring together researchers and practitioners from different areas of computational mathematics and computer science and to offer a platform for interdisciplinary applications in different areas of science and technology. In this way, *Algorithms* may become a forum for the exchange of new stimulating ideas between the different sub-communities working in the area of algorithms and their applications and the presentation of high-quality novel algorithmic approaches.

Editor-in-Chief

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