Special Issue

New Trends and Applications of High-Performance Computing

Message from the Guest Editors

High-performance computing (HPC) systems have revolutionized the way we process and analyze vast amounts of data, enabling breakthroughs in various scientific, engineering, and industrial domains. These systems, characterized by their exceptional processing power and parallel computing capabilities, have become indispensable tools for tackling complex computational problems that were once considered intractable.

The design and application of high-performance computing systems have witnessed significant advancements in recent years, leading to improved performance, energy efficiency, and scalability. This Special Issue aims to explore the latest developments and applications of high-performance computing systems, shedding light on their potential to address real-world challenges across diverse fields.

- high-performance computing
- architectures
- parallel programming
- scalable algorithms
- software frameworks/tools
- applications of high-performance computing systems

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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 multidimensional network.

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