## **Special Issue**

## Advanced Computer Architecture

## Message from the Guest Editors

We invite researchers, scholars, research engineers, and authors to submit their manuscripts on topics related to "Advanced Computer Architecture", with a particular emphasis on the following topics:

- Data-level parallelism architectures: Vector, SIMD, SIMT, etc.
- Superpipelined and Superscalar processors/multicores: design, implementation, and performance evaluation.
- Multiprocessor systems: performance or/and security evaluation.
- Efficient design of digital signal processors (DSP): design and implementation.
- Processor Pipeline: instruction pipelines, pipeline hazards and their resolutions, pipeline analysis, etc.
- Cache architecture and its optimization: coherence, consistency, and secure cache design.
- Memory hierarchy and its optimization: low latency, high throughput, energy dissipation, and/or security.
- Secure single-core/ multicore processor design.

This Special Issue is not limited to the above list. Any research papers targeting the future trends in computer architecture research will be considered. Papers will be published in an open-access form after peer review.

## **Guest Editors**

Prof. Dr. Mladen Berekovic

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## Deadline for manuscript submissions

closed (20 April 2023)



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## **About the Journal**

## 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.

## Editor-in-Chief

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