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Real, Complex and Hypercomplex Number Systems in Data Processing and Representation

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Deadline for manuscript submissions:
closed (20 January 2023)

Message from the Guest Editors

This Special Issue is aimed at a wide coverage of various aspects of data processing and presentation using both familiar number systems and non-traditional ones, including exotic ones.

- Residue number system;
- Multiple-base number systems;
- Logarithmic number system;
- Redundant binary number system;
- Decimal floating point number system;
- Fuzzy number system.

Topics include but are not limited to:

- Numbers in data processing and representation;
- Numerical algorithms for digital signal and image processing using various number systems;
- Various number systems in pattern recognition and representation;
- Circuits and systems for processing 1D, 2D, and 3D arrays, using data processing algorithms in various number systems;
- Real-, complex- and hypercomplex-valued deep learning techniques.

We invite researchers and investigators to contribute their original research or review articles to this Special Issue.



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Special Issue



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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.

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