Theory of Algorithms and Recursion Theory

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

The theory of algorithms is a part of computer science connected to the development of fast effective algorithms for various classes of tasks of Mathematics and its applications to practical aspects of human activity, such as information defense, searching and sorting algorithms in database systems, machine learning, etc.

Theoretical aspects of the theory of algorithms include such directions as classification of algorithms by their complexity, study of unsolvable problems, elaboration of special algorithms for quantum computers, and so on.

This Special Issue looks for novel developments in both theoretical and practical aspects of the theory of algorithms, including:

- Complexity theory of algorithms;
- Recursion theory and algebraic aspects of algorithms structures;
- Elaboration of fast algorithms for practical tasks in computer science;
- Cryptographic algorithms for reliable cyphering of crucial data;
- Algorithms for breaking computer ciphers;
- Novel algorithms for quantum computers.

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Special Issue

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Message from the Editor-in-Chief

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