THEORETICAL COMPUTER SCIENCE

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DESCRIPTION

_Theoretical Computer Science_ is mathematical and abstract in spirit, but it derives its motivation from practical and everyday computation. Its aim is to understand the nature of computation and, as a consequence of this understanding, provide more efficient methodologies. All papers introducing or studying mathematical, logic and formal concepts and methods are welcome, provided that their motivation is clearly drawn from the field of computing.

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AUDIENCE
Researchers in the Theoretical Aspects of Computer Science.

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Introduction
Theoretical Computer Science is mathematical and abstract in spirit, but it derives its motivation from practical and everyday computation. All papers introducing or studying mathematical, logic and formal concepts and methods are welcome, provided that their motivation is clearly drawn from the field of computing.

Papers published in Theoretical Computer Science are grouped in three sections according to their nature. Algorithms, automata, complexity and games, or TCS-A, is devoted to the study of algorithms and their complexity using analytical, combinatorial or probabilistic methods. Logic, semantics and theory of programming, or TCS-B, is devoted to formal methods to check properties of programs or implement formally described languages and contains all papers dealing with semantics of sequential and parallel programming languages. Natural Computing, or TCS-C, is devoted to the study of computing occurring in nature and computing inspired by nature. This section is focused on the theoretical aspects of natural computing with clear relevance to computing. Among others, it will contain papers dealing with the theoretical issues in evolutionary computing, neural networks, molecular computing, and quantum computing. Any queries about submissions and peer review should be addressed to the TCS editorial office: tcs@elsevier.com.

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