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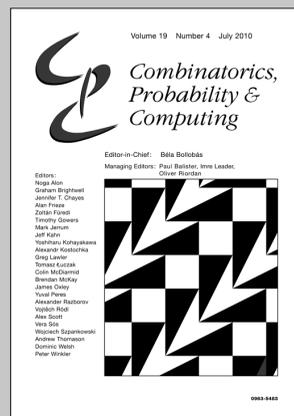
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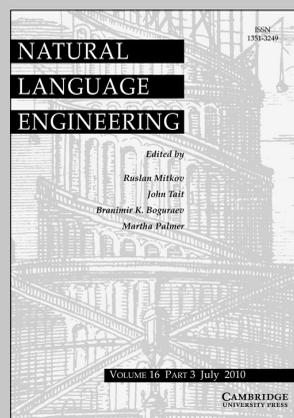
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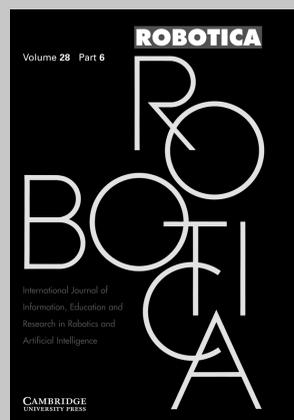
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Theory and Practice of Logic Programming

Published for the Association for Logic programming

Theory and Practice of
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VOLUME 10 PARTS 4-6 JULY 2010

Special Issue on
26th International Conference
on Logic Programming

edited by Manuel Hermenegildo and Torsten Schaub

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Mathematical Structures in Computer Science (MSCS) is a journal of theoretical computer science which focuses on the application of ideas from the structural side of mathematics and mathematical logic to computer science. The journal aims to bridge the gap between theoretical contributions and software design, publishing original papers or broad surveys with original perspectives in all areas of computing, provided that ideas or results from logic, algebra, geometry, category theory or other areas of logic and mathematics form a basis for the work. The journal also welcomes applications to computing based on the use of specific mathematical structures (e.g. topological and order-theoretic structures) as well as on proof-theoretic notions or results. In addition, it is interested in contributions in new interdisciplinary fields bridging computer science, quantum physics, mathematics and information theory. In particular, papers on mathematical formalisms for quantum computation, quantum information processing and communication will be considered.

The journal will also consider papers on computational modelling of epigenetic phenomena, protein-protein interactions, stochasticity in molecular cascades. Mathematical approaches to System Biology will be welcomed, within the broad framework of post-genomic views of embryogenesis and evolution.

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In order to promote the use of mathematical methods in computer science, expository and introductory papers are welcome, provided that there is a clear connection to computational issues or they investigate mathematical structures whose relevance to computer science is well established. However, these contributions should be directed to the broad audience of computer scientists to which this journal is addressed. Equally, discussions of a methodological or philosophical nature concerning the foundation of Computer Science are of interest for the journal.

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