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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12159
Disciplina	004
Soggetti	Computer science Computer science—Mathematics Discrete mathematics Data structures (Computer science) Information theory Theory of Computation Discrete Mathematics in Computer Science Data Structures and Information Theory Mathematics of Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Quantum Hashing and Fingerprinting for Quantum Cryptography and Computations -- Parameterized Analysis of Art Gallery and Terrain Guarding -- Central Positions in Social Networks -- Second-Order Finite Automata -- Isomorphic Distances Among Elections -- Tandem Duplications, Segmental Duplications and Deletions, and their Applications -- Faster 2-Disjoint-Shortest-Path Algorithm -- An Improvement to Chvátal and Thomassen's Upper Bound for Oriented Diameter -- The Normalized Algorithmic Information Distance Cannot be Approximated -- Definable Subsets of Polynomial-Time Algebraic Structures -- Families of Monotonic Trees: Combinatorial Enumeration and Asymptotics -- Nested Regular Expressions can be Compiled to

Small Deterministic Nested Word Automata -- On Embeddability of Unit Disk Graphs onto Straight Lines.-On the Decision Tree Complexity of Threshold Functions -- Randomized and Symmetric Catalytic Computation -- On the Parameterized Complexity of the Expected Coverage Problem -- Computational Hardness of Multidimensional Subtraction Games -- Parameterized Complexity of Fair Feedback Vertex Set Problem -- The Power of Leibniz-like Functions as Oracles -- Optimal Skeleton Huffman Trees Revisited -- The Subtrace Order and Counting First-Order Logic -- Speedable left-c.e. Numbers -- The Complexity of Controlling Condorcet, Fallback, and k-Veto Elections by Replacing Candidates or Voters -- On the Transformation of LL(k)-linear Grammars to LL(1)-linear -- On Computing the Hamiltonian Index of Graphs -- A Lower Bound for the Query Phase of Contraction Hierarchies and Hub Labels -- Kernelization of Arc Disjoint Cycle Packing in  $\alpha$ -bounded Digraphs -- On Subquadratic Derivational Complexity of Semi-Thue Systems -- The Untold Story of SBP -- Weighted Rooted Trees: Fat or Tall -- Groupoid Action and Rearrangement Problem of Bicolor Arrays by Prefix Reversals.

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### Sommario/riassunto

This book constitutes the proceedings of the 15th International Computer Science Symposium in Russia, CSR 2020, held in Yekaterinburg, Russia, in June 2020. The 25 full papers and 6 invited papers were carefully reviewed and selected from 49 submissions. The papers cover a broad range of topics, such as: algorithms and data structures; computational complexity, including hardness of approximation and parameterized complexity; randomness in computing, approximation algorithms, fixed-parameter algorithms; combinatorial optimization, constraint satisfaction, operations research; computational geometry; string algorithms; formal languages and automata, including applications to computational linguistics; codes and cryptography; combinatorics in computer science; computational biology; applications of logic to computer science, proof complexity; database theory; distributed computing; fundamentals of machine learning, including learning theory, grammatical inference and neural computing; computational social choice; quantum computing and quantum cryptography; theoretical aspects of big data. The conference was cancelled as a live conference due to the corona pandemic.

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