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Titolo	Efficient Algorithms [[electronic resource]] : Essays Dedicated to Kurt Mehlhorn on the Occasion of His 60th Birthday // edited by Susanne Albers, Helmut Alt, Stefan Näher
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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5760
Classificazione	DAT 003f DAT 530f SS 4800
Disciplina	005.1
Soggetti	Computer programming Computer science—Mathematics Discrete mathematics Algorithms Numerical analysis Programming Techniques Mathematics of Computing Discrete Mathematics Mathematical Applications in Computer Science Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Models of Computation and Complexity -- Building Mathematics-Based Software Systems to Advance Science and Create Knowledge -- On Negations in Boolean Networks -- The Lovász Local Lemma and Satisfiability -- Kolmogorov-Complexity Based on Infinite Computations -- Pervasive Theory of Memory -- Introducing Quasirandomness to Computer Science -- Sorting and Searching -- Reflections on Optimal and Nearly Optimal Binary Search Trees -- Some Results for Elementary Operations -- Maintaining Ideally Distributed Random Search Trees without Extra Space -- A Pictorial Description of

Cole's Parallel Merge Sort -- Self-matched Patterns, Golomb Rulers, and Sequence Reconstruction -- Combinatorial Optimization with Applications -- Algorithms for Energy Saving -- Minimizing Average Flow-Time -- Integer Linear Programming in Computational Biology -- Via Detours to I/O-Efficient Shortest Paths -- Computational Geometry and Geometric Graphs -- The Computational Geometry of Comparing Shapes -- Finding Nearest Larger Neighbors -- Multi-core Implementations of Geometric Algorithms -- The Weak Gap Property in Metric Spaces of Bounded Doubling Dimension -- On Map Labeling with Leaders -- The Crossing Number of Graphs: Theory and Computation -- Algorithm Engineering, Exactness, and Robustness -- Algorithm Engineering – An Attempt at a Definition -- Of What Use Is Floating-Point Arithmetic in Computational Geometry? -- Car or Public Transport—Two Worlds -- Is the World Linear? -- In Praise of Numerical Computation -- Much Ado about Zero -- Polynomial Precise Interval Analysis Revisited.

Sommario/riassunto

This Festschrift volume, published in honor of Kurt Mehlhorn on the occasion of his 60th birthday, contains 28 papers written by his former Ph.D. students and colleagues as well as by his former Ph.D. advisor, Bob Constable. The volume's title is a translation of the title of Kurt Mehlhorn's first book, "Effiziente Algorithmen", published by Teubner-Verlag in 1977. This Festschrift demonstrates how the field of algorithmics has developed and matured in the decades since then. The papers included in this volume are organized in topical sections on models of computation and complexity; sorting and searching; combinatorial optimization with applications; computational geometry and geometric graphs; and algorithm engineering, exactness and robustness.
