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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 405
Disciplina	005.1
Soggetti	Software engineering Computer programming Computer logic Computer graphics Data structures (Computer science) Software Engineering/Programming and Operating Systems Software Engineering Programming Techniques Logics and Meanings of Programs Computer Graphics Data Structures
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	A linear-time recognition algorithm for P 4-reducible graphs -- Fast parallel approximations of the maximum weighted cut problem through derandomization -- A new class of separators and planarity of chordal graphs -- Optimal parallel algorithms on circular-arc graphs -- Algebraic properties of the space of multivalued and paraconsistent logic programs -- An autoepistemic logical view of knowledge base -- A natural semantics for logic programs with negation -- A transformation system for deductive database modules with perfect model semantics -- An efficient distributed algorithm for finding articulation points, Bridges, and biconnected components in asynchronous networks -- Impossibility results in the presence of

multiple faulty processes -- An adaptive regulator approach for the design of load sharing algorithms -- An algebraic compositional semantics of an object oriented notation with concurrency -- An axiomatization of event structures -- Deducing causal relationships in CCS -- Annotated program transformations -- Algebraic software development concepts for module and configuration families -- On the limitations of locally robust positive reductions -- Query evaluation with null values: How complex is completeness? -- Average case complexity analysis of RETE pattern-match algorithm and average size of join in Databases -- The Frobenius problem -- An efficient implicit data structure for path testing and searching in rooted trees and forests -- Robust decompositions of polyhedra -- Gate matrix layout revisited: Algorithmic performance and probabilistic analysis -- Parallel parsing on a one-way linear array of finite-state machines -- Energy-time trade-offs in VLSI computations -- Time and real-time in programs -- A proof system for communicating processes with value-passing (extended abstract).

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### Sommario/riassunto

The papers in this volume accepted for the conference on foundations of software technology and theoretical computer science project research results in - Algorithmics: design and analysis of graph, geometric, algebraic and VLSI algorithms; data structures; average analysis; complexity theory; parallel parsing. - Concurrency: algebraic semantics, event structures. - Logic programming: algebraic properties, semantics. - Software technology: program transformations, algebraic methods. These results together with the formal techniques employed to present them reflect current trends pursued by leading research groups around the world. The papers treat their topics in depth by carefully reviewing existing results, developing and demonstrating new techniques and suggesting further directions for research.

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