Record Nr. UNINA9910144902203321 Algorithms and Computation [[electronic resource]]: 8th International **Titolo** Symposium, ISAAC'97, Singapore, December 17-19, 1997, Proceedings. // edited by Hon Wai Leong, Hiroshi Imai, Sanjay Jain Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-69662-8 Edizione [1st ed. 1997.] 1 online resource (XVII, 435 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 1350 Collana Disciplina 004.0151 Soggetti Computers Algorithms Computer science—Mathematics Computer mathematics Numerical analysis Theory of Computation Algorithm Analysis and Problem Complexity Discrete Mathematics in Computer Science Computation by Abstract Devices Computational Mathematics and Numerical Analysis **Numeric Computing** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Solving NP-hard combinatorial problems in the practical sense Invited presentation -- Airline crew-scheduling problem with many irregular flights -- Practical approach to a facility location problem for largescale logistics -- Hard instance generation for SAT -- Playing tetris on meshes and multi-dimensional Shearsort -- Formulation of the addition-shift-sequence problem and its complexity -- Weighted and unweighted selection algorithms for k sorted sequences -- An adaptive distributed fault-tolerant routing algorithm for the star graph -- Multicolor routing in the undirected hypercube -- Competitive source routing on tori and meshes -- Algorithms for enumerating all perfect, maximum and maximal matchings in bipartite graphs -- Augmenting

edge and vertex connectivities simultaneously -- Two-face horn extensions -- Decremental maintenance of reachability in hypergraphs and minimum models of horn formulae -- Algorithmic analysis of multithreaded algorithms -- A characterization of planar graphs by pseudo-line arrangements -- Optimal fault-tolerant broadcasting in trees -- A theoretical framework of hybrid approaches to MAX SAT --Exponential lower bounds on the size of OBDDs representing integer division -- On-line versus off-line in money-making strategies with brokerage -- Decision-making by hierarchies of discordant agents -- A new efficient off-line anonymous cash scheme -- Approximating unweighted connectivity problems in parallel -- A randomized linear work EREW PRAM algorithm to find a minimum spanning forest --Efficient parallel algorithms for planar st-graphs -- Peg-solitaire, string rewriting systems and finite automata -- On the size of probabilistic formulae -- Homophonic coding with logarithmic memory size --Complexity and modeling aspects of mesh refinement into quadrilaterals -- Topology oriented vs. exact arithmetic — Experience in implementing the three-dimensional convex hull algorithm -- The complexity of learning branches and strategies from queries --Singularities make spatial join scheduling hard -- A faster onedimensional topological compaction algorithm -- Algorithms for finding optimal disjoint paths around a rectangle -- An algorithm for finding a region with the minimum total L 1 from prescribed terminals -- On defect sets in bipartite graphs (extended abstract) -- Dynamic programming on distance-hereditary graphs -- On the equivalence in complexity among basic problems on bipartite and parity graphs --All-cavity maximum matchings -- Fast algorithms for computing ?-Skeletons and their relatives -- A branch-and-cut approach for minimum weight triangulation -- An efficient approximation scheme for the subset-sum problem -- Competitive call control in mobile networks -- Generalized swap-with-parent schemes for selforganizing sequential linear lists.

Sommario/riassunto

This book constitutes the refereed proceedings of the 8th International Symposium on Algorithms and Computation, ISAAC'97, held in Singapore in December 1997. The 42 revised full papers presented were selected from a total of 98 submissions. The scope of the volume spans the whole area of algorithms from discrete mathematics and complexity theory to algorithms design and evaluation in a variety of applicational areas. Among the topics addressed are scheduling and logistics, networking and routing, combinatorial optimization, graph-computations, algorithmic learning, computational geometry, etc.