Record Nr. UNISA996465774803316 Algorithms and Computation [[electronic resource]]: 4th International **Titolo** Symposium, ISAAC '93, Hong Kong, December 15-17, 1993. Proceedings / / edited by Kam W. Ng, Prabhakar Raghavan, N.V. Balasubramanian, Francis Y.L. Chin Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1993 **ISBN** 3-540-48233-4 Edizione [1st ed. 1993.] Descrizione fisica 1 online resource (XIII, 546 p.) Collana Lecture Notes in Computer Science, , 0302-9743; ; 762 Disciplina 004.0151 Soggetti Computers Combinatorics **Probabilities Statistics** Information storage and retrieval Theory of Computation Computation by Abstract Devices Probability Theory and Stochastic Processes Statistics, general Information Storage and Retrieval Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Reaching a goal with directional uncertainty -- Constructing degree-3 spanners with other sparseness properties -- Remembering conflicts in history yields dynamic algorithms -- Coloring random graphs in polynomial expected time -- Graphical degree sequence problems with connectivity requirements -- How to treat delete requests in semi-

spanners with other sparseness properties -- Remembering conflicts in history yields dynamic algorithms -- Coloring random graphs in polynomial expected time -- Graphical degree sequence problems with connectivity requirements -- How to treat delete requests in semi-online problems -- Finding the shortest watchman route in a simple polygon -- Constructing shortest watchman routes by divide-and-conquer -- A graph coloring result and its consequences for some guarding problems -- The maximum k-dependent and f-dependent set problem -- Finding shortest non-crossing rectilinear paths in plane regions -- Treewidth of circle graphs -- A framework for constructing

heap-like structures in-place -- Double-ended binomial gueues -- A simple balanced search tree with O(1) worst-case update time --Mapping dynamic data and algorithm structures into product networks -- Permutation routing on reconfigurable meshes -- Adaptive and oblivious algorithms for d-cube permutation routing -- On quadratic lattice approximations -- A 2/3-approximation of the matroid matching problem -- Using fractal geometry for solving divide-andconquer recurrences -- Simple combinatorial Gray codes constructed by reversing sublists -- Time space tradeoffs (getting closer to the barrier?) -- Separating exponentially ambiguous NFA from polynomially ambiguous NFA -- Threshold computation and cryptographic security -- On the Power of reading and writing simultaneously in parallel computations -- Relativizing complexity classes with Random Oracles -- An introduction to perpetual gossiping -- A probabilistic selection network with butterfly networks -- Optimal group gossiping in hypercubes under wormhole routing model -- Optimal linear broadcast routing with capacity limitations -- Multicommodity flows: A survey of recent research -- Parallel construction of canonical ordering and convex drawing of triconnected planar graphs -- Number theory helps line detection in digital images an extended abstract -- Optimally computing the shortest weakly visible subedge of a simple polygon preliminary version -- Multicommodity flows in even, planar networks -- Linear time algorithms for disjoint Two-Face Paths Problems in planar graphs -- Robot mapping: Foot-prints vs tokens -- Recent developments on the approximability of combinatorial problems -- On the relationship among cryptographic physical assumptions --Separating complexity classes related to bounded alternating ?branching programs -- The complexity of the optimal variable ordering problems of shared binary decision diagrams -- On Horn envelopes and hypergraph transversals -- Page migration algorithms using work functions -- Memory paging for connectivity and path problems in graphs -- Randomized competitive algorithms for successful and unsuccessful search on self-adjusting linear lists -- Randomized online algorithms for the page replication problem -- New algorithms for minimizing the longest wire length during circuit compaction --Parallel algorithms for single-layer channel routing -- Consecutive interval guery and dynamic programming on intervals -- An improved algorithm for the traveler's problem -- Vehicle scheduling on a tree with release and handling times -- Scheduling algorithms for a chainlike task system -- Weighted independent perfect domination on cocomparability graphs -- Plane sweep algorithms for the polygonal approximation problems with applications -- Optimal rectilinear steiner tree for extremal point sets -- Faster approximation algorithms for the rectilinear steiner tree problem.

Sommario/riassunto

This volume presents the proceedings of the fourth annual International Symposium on Algorithms and Computation, held in Hong Kong in December 1993. Numerous selected papers present original research in such areas as design and analysis of algorithms, computational complexity, and theory of computation. Topics covered include: - automata, languages, and computability, - combinatorial, graph, geometric, and randomized algorithms, - networks and distributed algorithms, - VLSIand parallel algorithms, - theory of learning and robotics, - number theory and robotics. Three invited papers are also included.