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Disciplina	005.1
Soggetti	Software engineering Algorithms Artificial intelligence—Data processing Computer science—Mathematics Discrete mathematics Numerical analysis Computer graphics Software Engineering Data Science Discrete Mathematics in Computer Science Numerical Analysis Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Lectures -- An Alternative Ranking Problem for Search Engines -- Engineering Fast Route Planning Algorithms -- Random Models for Geometric Graphs (Abstract) -- Session 1 (Route Planning) -- Better Landmarks Within Reach -- Landmark-Based Routing in Dynamic Graphs -- Dynamic Highway-Node Routing -- Session 2 (Dynamic Trees, Skip Lists, and Bloom Filters) -- Dynamic Trees in Practice -- On the Cost of Persistence and Authentication in Skip Lists -- Cache-,

Hash- and Space-Efficient Bloom Filters -- Session 3 (Crossing Minimization, TSP, and Vehicle Routing) -- Crossing Minimization in Weighted Bipartite Graphs -- Fast Minimum-Weight Double-Tree Shortcutting for Metric TSP -- A Robust Branch-Cut-and-Price Algorithm for the Heterogeneous Fleet Vehicle Routing Problem -- Session 4 (Network Routing and Stability) -- Simple and Efficient Geographic Routing Around Obstacles for Wireless Sensor Networks -- A Distributed Primal-Dual Heuristic for Steiner Problems in Networks -- An Experimental Study of Stability in Heterogeneous Networks -- Session 5 (Strings and Range Searching) -- Simple Compression Code Supporting Random Access and Fast String Matching -- Engineering a Compressed Suffix Tree Implementation -- Simple Space-Time Trade-Offs for AESA -- Session 6 (Matching, Flows, and Spanners) -- Engineering Algorithms for Approximate Weighted Matching -- Experimental Evaluation of Parametric Max-Flow Algorithms -- Experimental Study of Geometric t-Spanners: A Running Time Comparison -- Session 7 (Covering, Coloring, and Partitioning) -- Vertex Cover Approximations on Random Graphs -- Optimal Edge Deletions for Signed Graph Balancing -- Algorithms for the Balanced Edge Partitioning Problem -- Session 8 (Applications) -- Experimental Evaluations of Algorithms for IP Table Minimization -- Algorithms for Longer OLED Lifetime -- Improving Tree Search in Phylogenetic Reconstruction from Genome Rearrangement Data -- Session 9 (Spanning Trees) -- Benchmarks for Strictly Fundamental Cycle Bases -- A Primal Branch-and-Cut Algorithm for the Degree-Constrained Minimum Spanning Tree Problem -- Experimental Analysis of Algorithms for Updating Minimum Spanning Trees on Graphs Subject to Changes on Edge Weights -- Session 10 (Packing and Auctions) -- An Efficient Implementation for the 0-1 Multi-objective Knapsack Problem -- Trunk Packing Revisited -- Exact Algorithms for the Matrix Bid Auction.

Sommario/riassunto

This book constitutes the refereed proceedings of the 6th International Workshop on Experimental and Efficient Algorithms, WEA 2007, held in Rome, Italy, in June 2007. The 30 revised full papers presented together with 3 invited talks were carefully reviewed and selected from 121 submissions. Fostering and disseminating high quality research results focused on the experimental analysis of algorithms the papers are devoted to the design, analysis, implementation, experimental evaluation, and engineering of efficient algorithms. Among the application areas addressed are most fields applying advanced algorithmic techniques, such as combinatorial optimization, approximation, graph theory, discrete mathematics, data mining, simulation, cryptography and security, scheduling, searching, sorting, string matching, coding, networking, etc.
