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Nota di contenuto	Data Structures -- Parallel Construction of Succinct Trees -- Tree Compression with Top Trees Revisited -- A Bulk-Parallel Priority Queue in External Memory with STXXL -- Graph Problems I -- Greedily Improving Our Own Centrality in a Network -- An Exact Algorithm for Diameters of Large Real Directed Graphs -- Graph Partitioning for Independent Sets -- Finding Connected Subgraphs of Fixed Minimum Density: Implementation and Experiments -- Combinatorial Optimization I -- On the Generation of Cutting Planes which Maximize the Bound Improvement -- Separation of Generic Cutting Planes in Branch-and-Price Using a Basis -- On a Nonconvex MINLP Formulation of the Euclidean Steiner Tree Problem in n-Space -- Scheduling and Allocation -- Scheduling MapReduce Jobs and Data Shuffle on

Unrelated Processors -- Station Assignment with Reallocation -- Online Knapsack of Unknown Capacity: Energy Optimization for Smartphone Communications -- Combinatorial Optimization II -- Reoptimization Techniques for MIP Solvers -- Submodular Minimization in the Context of Modern LP and MILP Methods and Solvers -- Is Nearly-linear the Same in Theory and Practice? A Case Study with a Combinatorial Laplacian Solver -- Efficient and Practical Tree Preconditioning for Solving Laplacian Systems -- Other Applications I -- Efficient Generation of Stable Planar Cages for Chemistry -- Accurate and Efficient Methods to Improve Multiple Circular Sequence Alignment -- Solving k-means on High-Dimensional Big Data -- X Contents -- Transportation Networks -- Public Transit Labeling -- On Balanced Separators in Road Networks -- SALT. A Unified Framework for All Shortest-Path Query Variants on Road Networks -- Other Applications II -- Huffman Codes versus Augmented Non-Prefix-Free Codes -- Experimental Analysis of an Online Dictionary Matching Algorithm for Regular Expressions with Gaps -- in Bimatrix Games -- The Effect of Almost-Empty Faces on Planar Kandinsky Drawings -- Graph Problems II -- An Experimental Analysis of a Polynomial Compression for the Steiner Cycle Problem -- On the Quadratic Shortest Path Problem -- A Solution Merging Heuristic for the Steiner Problem in Graphs Using Tree Decompositions.

Sommario/riassunto

This book constitutes the refereed proceedings of the 14th International Symposium on Experimental Algorithms, SEA 2015, held in Paris, France, in June/July 2015. The 30 revised full papers presented were carefully reviewed and selected from 76 submissions. The main theme of the symposium is the role of experimentation and of algorithm engineering techniques in the design and evaluation of algorithms and data structures. The papers are grouped in topical sections on data structures, graph problems, combinatorial optimization, scheduling and allocation, and transportation networks.
