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Nota di contenuto	Discrepancy theory and computational geometry -- Dynamic motion planning in low obstacle density environments -- Visibility-based pursuit-evasion in a polygonal environment -- Maintaining the extent of a moving point set -- Finding cores of limited length -- On bipartite crossings, largest biplanar subgraphs, and the linear arrangement problem -- Approximation algorithms for a genetic diagnostics problem -- Cartographic line simplication and polygon CSG formulae in O(n log* n) time -- Constrained TSP and low-power computing -- On-

line load balancing for related machines -- A linear-time algorithm for the 1-mismatch problem -- On some geometric optimization problems in layered manufacturing -- New TSP construction heuristics and their relationships to the 2-opt -- Pattern matching in hypertext -- Multiple approximate string matching -- Applied computational geometry — Abstract -- Checking the convexity of polytopes and the planarity of subdivisions (extended abstract) -- Voronoi diagrams for polygon-offset distance functions -- Randomized algorithms for that ancient scheduling problem -- Optimal parallel algorithms for proximate points, with applications -- An efficient algorithm for shortest paths in vertical and horizontal segments -- On geometric path query problems -- On-line scheduling with hard deadlines -- Load balanced mapping of data structures in parallel memory modules for fast and conflict-free templates access -- Parallel vs. parametric complexity -- Position-independent near optimal searching and on-line recognition in star polygons -- Dynamic data structures for fat objects and their applications -- Intractability of assembly sequencing: Unit disks in the plane -- On hamiltonian triangulations in simple polygons (Extended Abstract) -- Computing orthogonal drawings with the minimum number of bends -- On a simple depth-first search strategy for exploring unknown graphs -- Orthogonal drawing of high degree graphs with small area and few bends -- A centroid labelling technique and its application to path selection in trees -- Offset-polygon annulus placement problems -- Computing constrained minimum-width annuli of point sets -- Geometric Applications of Posets -- Constructing pairwise disjoint paths with few links -- Trans-dichotomous algorithms without multiplication — some upper and lower bounds -- An approximation algorithm for stacking up bins from a conveyer onto pallets -- Relaxed balance through standard rotations -- Efficient breakout routing in printed circuit boards -- Planarity, revisited (extended abstract).

Sommario/riassunto

This book constitutes the refereed proceedings of the 5th International Workshop on Algorithms and Data Structures, WADS'97, held in Nova Scotia, Halifax, Canada, in August 1997. The 37 revised full papers presented were carefully selected from a total of 81 submissions. Also included are four abstracts and one full contribution corresponding to the invited talks. Among the topics covered are data structures and algorithmic aspects in a variety of areas like computational geometry, graph theory, networking, load balancing, optimization, approximation, sorting, pattern matching, etc.