Record Nr. UNISA996465318303316 Graph-Theoretic Concepts in Computer Science [[electronic resource]]: **Titolo** International Workshop WG `88 Amsterdam, The Netherlands, June 15-17, 1988. Proceedings / / edited by Jan van Leeuwen Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 1989 **ISBN** 3-540-46076-4 Edizione [1st ed. 1989.] Descrizione fisica 1 online resource (X, 462 p.) Lecture Notes in Computer Science, , 0302-9743 ; ; 344 Collana 511.6 Disciplina Soggetti Combinatorics Mathematics Architecture, Computer Algorithms Data structures (Computer science) Computer graphics Mathematics, general Computer System Implementation Algorithm Analysis and Problem Complexity **Data Structures** Computer Graphics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph NC-algorithms for graphs with small treewidth -- Graph-theoretic Nota di contenuto properties compatible with graph derivations -- The monadic secondorder logic of graphs: Definable sets of finite graphs -- On systems of equations defining infinite graphs -- Fault tolerant networks of specified diameter -- DFS tree construction: Algorithms and characterizations -- Serializable graphs -- Transitive closure algorithms for very large databases -- A graph-based decomposition approach for recursive query processing -- Construction of deterministic transition graphs from dynamic integrity constraints --(Time x space)-efficient implementations of hlerarchical conceptual

models -- Dominance in the presence of obstacles -- Separating a

polyhedron by one translation from a set of obstacles -- Linear time algorithms for testing approximate congruence in the plane -- Moving regular k-gons in contact -- Epsilon-nets for halfplanes -- Greedy triangulation can be efficiently implemented in the average case -- A simple systolic method to find all bridges of an undirected graph --Colouring perfect planar graphs in parallel -- An efficient parallel algorithm for the all pairs shortest path problem -- A parallel algorithm for channel routing -- Application of graph theory to topology generation for logic gates -- On the estimate of the size of a directed graph -- The average size of ordered binary subgraphs -- O(n2) algorithms for graph planarization -- Bandwidth and profile minimization -- On the spanning trees of weighted graphs -- On paths in search or decision trees which require almost worst-case time -- A time-optimal parallel algorithm for the computing of Voronoi-diagrams -- Voronoi diagrams in the moscow metric -- A sweep algorithm and its implementation: The all-nearest-neighbors problem revisited.

Sommario/riassunto

This volume presents the proceedings of the 14th International Workshop on Graph-Theoretic Concepts in Computer Science (WG '88), held from June 15 to 17, 1988 in Amsterdam, The Netherlands. It contains 31 papers on new or current developments in the area of graph-based algorithms. The topics covered include e.g. structural graph theory, parallel graph algorithms, graph-based modeling (in database theory and VLSI), computational geometry and applied graph theory. The book contains the revised versions of all the papers presented at the workshop. The revisions are based on comments and suggestions received by the authors during and after the workshop.