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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 894
Disciplina	006.6
Soggetti	Application software Discrete mathematics Algorithms Combinatorics Software engineering Computer graphics Computer Applications Discrete Mathematics Algorithm Analysis and Problem Complexity Software Engineering Computer Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Three-dimensional graph drawing -- 3-D visualization of program information (extended abstract and system demonstration) -- 3D layout of reachability graphs of communicating processes -- A flow approach to upward drawings of toroidal maps -- Improved algorithms and bounds for orthogonal drawings -- On bend-minimum orthogonal upward drawing of directed planar graphs -- Grid layouts of block diagrams — bounding the number of bends in each connection (extended abstract) -- On drawing a graph convexly in the plane (extended abstract) -- On drawing angle graphs -- Regular edge labelings and drawings of planar graphs -- Minimum-width grid drawings of plane graphs extend abstract -- Regular orientations,

arboricity, and augmentation -- The polyhedral approach to the maximum planar subgraph problem: New chances for related problems -- Crossing numbers of graphs, lower bound techniques and algorithms: A survey -- Graph-drawing contest report -- Visibility graphs and oriented matroids (extended abstract) -- Rectangle-visibility representations of bipartite graphs -- On the number of directions in visibility representations of graphs (extended abstract) -- Directed VR-representable graphs have unbounded dimension -- GraphEd: A graphical platform for the implementation of graph algorithms (extended abstract and demo) -- Graph layout through the VCG tool -- Drawing telecommunication networks -- Reduction of visual complexity in dynamic graphs -- TOSCANA — A graphical tool for analyzing and exploring data -- Characterization and recognition of point-halfspace and related orders -- Redrawing a graph within a geometric tolerance -- On the difficulty of embedding planar graphs with inaccuracies -- A system for drawing graphs with geometric symmetry -- Demonstration of the interactive graph visualization system da Vinci -- CG: A graph drawing system using graph-grammar parsing -- A demonstration of interactive graph based visual language applications -- A simple algorithm for drawing large graphs on small screens -- Molecular graph eigenvectors for molecular coordinates -- On the computational complexity of upward and rectilinear planarity testing -- Upward planarity testing of outerplanar dags (extended abstract) -- Optimal-area upward drawings of AVL trees -- Upward drawing on the plane grid using less ink -- Proximity drawability: A survey extended abstract -- Proximity constraints and representable trees (extended abstract) -- Recognizing rectangle of influence drawable graphs (extended abstract) -- A simple and unified method for drawing graphs: Magnetic-spring algorithm -- Integration of declarative and algorithmic approaches for layout creation -- A fast adaptive layout algorithm for undirected graphs (extended abstract and system demonstration) -- Drawing graphs by example efficiently: Trees and planar acyclic digraphs (extended abstract) -- Designing graph drawings by layout graph grammars -- Encoding presentation emphasis algorithms for graphs -- A practical approach to static node positioning -- Map generalization as a graph drawing problem -- A geometrical heuristic for drawing concept lattices -- Poster gallery report.

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## Sommario/riassunto

This volume constitutes the proceedings of the DIMACS International Workshop on Graph Drawing, GD '94, held in Princeton, New Jersey in October 1994. The 50 papers and system descriptions presented address the problem of constructing geometric representations of abstract graphs, networks and hypergraphs, with applications to key technologies such as software engineering, databases, visual interfaces, and circuit layout; they are organized in sections on three-dimensional drawings, orthogonal drawings, planar drawings, crossings, applications and systems, geometry, system demonstrations, upward drawings, proximity drawings, declarative and other approaches; in addition reports on a graph drawing contest and a poster gallery are included.

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