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Titolo	Graph Drawing [[electronic resource]] : Symposium on Graph Drawing, GD'95; Passau, Germany, September 20-22, 1995. Proceedings / / edited by Franz Brandenburg
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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1027
Disciplina	511/.5
Soggetti	Geometry Algorithms Combinatorics Software engineering Computer graphics Computer-aided engineering Algorithm Analysis and Problem Complexity Software Engineering Computer Graphics Computer-Aided Engineering (CAD, CAE) and Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Quasi-planar graphs have a linear number of edges -- Universal 3-Dimensional visibility representations for graphs -- KGB a customizable graph browser -- Adocs: a drawing system for generic combinatorial structures -- New lower bounds for orthogonal graph drawings -- The effect of graph layout on inference from social network data -- Drawing nice projections of objects in space -- Optimal algorithms to embed trees in a point set -- An experimental comparison of force-directed and randomized graph drawing algorithms -- On the complexity of recognizing intersection and touching graphs of disks -- Fast interactive 3-D graph visualization -- GD-Workbench: A system for prototyping and testing graph drawing algorithms -- CABRI-Graph: A tool for research and teaching in graph theory -- Graph folding:

Extending detail and context viewing into a tool for subgraph comparisons -- Upward numbering testing for triconnected graphs -- On a visibility representation of graphs -- 3D graph drawing with simulated annealing -- The botanical beauty of random binary trees -- The strength of weak proximity (extended abstract) -- COMAIDE: Information visualization using cooperative 3D diagram layout -- Vertex splitting and tension-free layout -- Drawing stressed planar graphs in three dimensions -- Graph-Drawing contest report -- New results on a visibility representation of graphs in 3D -- Generalized fisheye views of graphs -- Drawing high degree graphs with low bend numbers -- The drawing of configurations -- Upward drawings on planes and spheres -- Grid embedding of 4-connected plane graphs -- Recognizing leveled-planar dags in linear time -- Contact graphs of curves -- On representations of some thickness-two graphs -- Drawing force-directed graphs using Optigraph -- Exact and heuristic algorithms for 2-layer straightline crossing minimization -- Constraint-based spring-model algorithm for graph layout -- Layout algorithms of graph-like diagrams for GRADE windows graphic editors -- Grid intersection and box intersection graphs on surfaces -- How to draw outerplanar minimum weight triangulations -- Portable graph layout and editing -- A parallel simulated annealing algorithm for generating 3D layouts of undirected graphs -- Incremental layout in DynaDAG -- Issues in interactive orthogonal graph drawing (preliminary version) -- Automatic drawing of compound digraphs for a real-time power system simulator -- Validating graph drawing aesthetics -- A fast heuristic for hierarchical Manhattan layout -- CLaX — A visualized compiler -- Crossing numbers of meshes -- Directed graphs drawing by Clan-based decomposition -- TOSCANA management system for conceptual data -- Graph layout adjustment strategies -- A generic compound graph visualizer/manipulator: D-ABDUCTOR -- Generating customized layouts -- GOVE Grammar-Oriented Visualisation Environment -- Swan: A data structure visualization system.

Sommario/riassunto

This book constitutes the refereed proceedings of the international Symposium on Graph Drawing, GD '95, held in Passau, Germany, in September 1995. The 40 full papers and 12 system demonstrations were selected from a total of 88 submissions and include, in their revised versions presented here, the improvements suggested during the meeting. This book also contains a report on the graph-drawing contest held in conjunction with GD '95. Graph drawing is concerned with the problem of visualizing structural information, particularly by constructing geometric representations of abstract graphs and networks. The importance of this area for industrial applications is testified by the large number of people with industrial affiliations, submitting papers and participating in the meeting.