

1. Record Nr.	UNISA996465673403316
Titolo	Graph Drawing [[electronic resource]] : 20th International Symposium, GD 2012, Redmond, WA, USA, September 19-21, 2012, Revised Selected Papers / / edited by Walter Didimo, Maurizio Patrignani
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-36763-1
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XVI, 582 p. 231 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 7704
Disciplina	006.6
Soggetti	Computer science—Mathematics Discrete mathematics Algorithms Computer networks Computer science User interfaces (Computer systems) Human-computer interaction Discrete Mathematics in Computer Science Computer Communication Networks Models of Computation Symbolic and Algebraic Manipulation User Interfaces and Human Computer Interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Flips -- Interactive Network Exploration to Derive Insights: Filtering, Clustering, Grouping, and Simplification -- Counting Plane Graphs: Cross-Graph Charging -- Disconnectivity and Relative Positions in Simultaneous Embeddings -- Graph Drawing in the Cloud: Privately Visualizing Relational Data Using Small Working Storage -- Graph Drawing by Classical Multidimensional Scaling: New Perspectives -- Progress on Partial Edge Drawings -- Implementing a Partitioned 2-Page Book Embedding Testing Algorithm -- Shrinking the Search Space for Clustered Planarity -- Open Rectangle-of-Influence Drawings of

Non-triangulated Planar Graphs -- The Approximate Rectangle of Influence Drawability Problem -- Planar Lombardi Drawings for Subcubic Graphs -- Circle-Representations of Simple 4-Regular Planar Graphs -- Smooth Orthogonal Layouts -- Toward a Theory of Planarity: Hanani-Tutte and Planarity Variants -- Planar Graphs as VPG-Graphs -- Proportional Contact Representations of 4-Connected Planar Graphs -- Edge-Weighted Contact Representations of Planar Graphs -- Column-Based Graph Layouts -- Upward Planarity Testing via SAT -- Self-approaching Graphs -- Homotopic C-Oriented Routing -- Covering Paths for Planar Point Sets -- On the Density of Maximal 1-Planar Graphs -- Testing Maximal 1-Planarity of Graphs with a Rotation System in Linear Time -- Tangles and Degenerate Tangles -- The Visible Perimeter of an Arrangement of Disks -- Canonical Ordering for Triangulations on the Cylinder, with Applications to Periodic Straight-Line Drawings -- Planar Preprocessing for Spring Embedders -- StreamEB: Stream Edge Bundling -- Drawing Clustered Graphs as Topographic -- On The Usability of Lombardi Graph Drawings -- Drawing Metro Maps Using Bézier Curves -- Mental Map Preservation Helps User Orientation in Dynamic Graphs -- Clustering, Visualizing, and Navigating for Large Dynamic Graphs -- DAGView: An Approach for Visualizing Large Graphs -- Time-Space Maps from Triangulations -- Graph Drawing in TikZ -- Optical Graph Recognition -- Interactive Random Graph Generation with Evolutionary Algorithms.

---

#### Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 20th International Symposium on Graph Drawing, GD 2012, held in Redmond, WA, USA, in September 2012. The 42 revised full papers presented together with 4 revised short papers and 8 poster descriptions were carefully reviewed and selected from 92 submissions. They cover a wide range of topics in two main tracks: combinatorial and algorithmic aspects, and visualization systems and interfaces. In addition, reports of the 19th Annual Graph Drawing Contest, which was held during the conference, and of a workshop on theory and practice of graph drawing to celebrate Professor Peter Eades' 60th birthday are included in the volume.

---