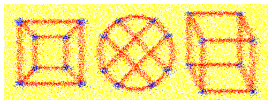
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Special Issue on Selected Papers from the Sixteenth International Symposium on Graph Drawing, GD 2008
Guest Editor's Foreword

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This special issue is devoted to the 16th International Symposium on Graph Drawing, which was held in September 2008 in Hersonissos, near Heraklion, Crete, Greece. We invited several of the highest-ranked papers, providing a view of the depth and width of various areas in graph drawing research. The authors submitted extended versions of their conference papers, which were refereed by the reviewers, and then revised afterwards.

Both theoretical and practical aspects are covered in this collection. The topics range from (a) the identification of families of graphs (i) with low slope parameter or (ii) admitting greedy drawings, to more applied topics such as: (b) metro-line representations, (c) node overlap removal, and (d) visual analysis.

Slope parameter is a topic that was introduced recently in graph theory and is strongly related to the more traditional measures of geometric thickness and slope number. Balázs Keszegh, János Pach, Dömötör Pálvölgyi and Géza Tóth shed light into this intriguing field by showing that cubic graphs have bounded slope parameter.

The computation of greedy drawings of graph families is also a new direction in the theoretical circles of graph drawing. A greedy drawing is one in which, given any destination vertex, every other vertex of the drawing has a neighbor which is nearer to the destination than itself. This implies the existence of a greedy routing algorithm in the graph, when interpreted as a network. Patrizio Angelini, Fabrizio Frati and Luca Grilli introduce an algorithm to construct greedy drawings of triangulations.

Coming to more applied subjects, Emden Gansner and Yifan Hu tackle the problem of transforming a graph layout where vertices are modeled as points into a drawing where vertices have a non-trivial size and where the information conveyed by the original vertex placement is preserved as much as possible. They show that the proposed proximity stress model is both effective and efficient for perfoming this task.

It is superfluous to stress the importance of automatically producing drawings of given metro maps. Computing readable metro maps in polynomial time is the subject of "Two Polynomial Time Algorithms for the Metro-Line Crossing Minimization Problem" by Evmorfia Argyriou, Michael Bekos, Michael Kaufmann and Antonios Symvonis.

Finally, in the paper "Visual Analysis of One-To-Many Matched Graphs" Emilio Di Giacomo, Walter Didimo, Giuseppe Liotta and Pietro Palladino describe a system and a technique to visually explore the relationships between two graphs, where vertices of the first graph are associated to disjoint subsets of vertices of the second graph. Their work shows that hybrid visualization, when coupled with state-of-the-art graph drawing techinques, is a powerful tool to cope with the visualization needs arising from real world applications.

Many thanks go to the authors for contributing their high-quality papers, to the reviewers for their excellent professional service, and to the Editors of the Journal of Graph Algorithms and Applications for making this special issue possible.