



Journal of Graph Algorithms and Applications
<http://jgaa.info/> vol. 12, no. 3, pp. 265–266 (2008)

**Special Issue on Selected Papers from the
6th Asia-Pacific Symposium on Visualisation
APVIS 2007**

Guest Editor's Foreword

Seok-Hee Hong

School of Information Technologies
University of Sydney

Visualisation has become an increasingly active research field. The papers in this special issue is devoted to the 6th Asia-Pacific Symposium on Visualisation, APVIS 2007, held during 5-7 February, 2007 in Sydney, Australia.

APVIS is an annual international symposium to be held in the Asia-Pacific region with the objective to foster greater exchange between visualisation researchers and practitioners. The scope of the conference includes various aspects of Information Visualisation, Scientific Visualisation and Graph Drawing.

Several highest-rated papers on Graph Drawing were invited for this special issue. The authors who agreed to contribute to the special issue submitted extended versions of their conference papers which were then refereed by reviewers and revised afterwards.

The result is a nice collection of papers on Graph Drawing research, which was inspired by practical applications such as visualisations of directed graphs and overlapping clustered graphs, and boundary labelling problems.

In the first contribution, Didimo, Giordano and Liotta study a new variation of the classical clustered graph planarity testing problem, where clusters have overlapping structure. They present new results including characterizations, models, and OC-planarity testing and embedding algorithms.

Harrigan and Healy present a new method for drawing directed graphs which emphasizes a significant spanning tree. The method combines two steps of the Sugiyama framework, levelling and crossing minimization, by finding a level planar graph with respect to some spanning tree in linear time.

In boundary labeling, each point site is uniquely connected to a label placed on the boundary of an enclosing rectangle by a leader, which may be a rectilinear or straight line segment. Lin, Kao and Yen consider the new crossing minimization problem for multi-site-to-one-label boundary labeling. The authors show that the crossing minimization problem is NP-complete under certain one-side and two-side labeling schemes. Approximation algorithms and heuristics are presented for the intractable problems.

Bekos, Kaufmann and Symvonis study the map labeling problem where the sites to be labeled are restricted to a line. The authors consider two minimization criteria: total leader length, and total number of leader bends. They show that both problems are NP-complete if the labels can be placed on both sides of the line, while presenting polynomial time algorithms for the case where the labels are placed on only one side of the line.

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