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Graph Drawing

20th International Symposium, GD 2012
Redmond, WA, USA, September 19-21, 2012
Revised Selected Papers

Springer

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Preface

The 20th International Symposium on Graph Drawing (GD 2012) was held in Redmond, Washington, USA, September 19-21, 2012. It was hosted by Microsoft Research and was attended by 80 participants from 14 countries.

For the first time in the history of the symposium, the call for papers was articulated into two tracks: "Track 1 — Combinatorial and Algorithmic Aspects" and "Track 2 — Visualization Systems and Interfaces". In response to the call for papers, the Program Committee received 92 paper submissions, 59 in Track 1 and 33 in Track 2, each describing original research of theoretical or practical interest. Each paper submission was reviewed by at least three Program Committee members and the reviewers' comments were returned to the authors. Following extensive discussions, the committee accepted 46 papers in total; 32 in Track 1 (29 long papers and 3 short papers) and 14 in Track 2 (13 long papers and 1 short paper). The Program Committee assigned two best paper awards, one in Track 1 to the paper "Planar Lombardi Drawings for Subcubic Graphs" by D. Eppstein, and one in Track 2 to the paper "Visualizing Streaming Text Data with Dynamic Graphs and Maps" by E. R. Gansner, Y. Hu, and S. North. Furthermore, ten posters were submitted and eight of them were accepted for presentation at the conference. Each poster is granted a two page description in these proceedings.

Two invited speakers, Prosenjit Bose from Carleton University and Ben Shneiderman from the University of Meryland, gave fascinating and inspiring talks. Prof. Bose focused on problems and results concerned with edge flips in triangulations, thus his talk was mainly devoted to theoretical aspects of geometric graphs. Prof. Ben Shneiderman, together with his coauthor Cody Dunne, discussed practical aspects of graph visualization, aimed at the development of tools for interactive network analysis and discovery.

Following what is now a tradition, the 19th Annual Graph Drawing Contest was held during the conference. A report is included in this volume. To celebrate the 20th anniversary of the symposium, a *software game* contest was introduced for the first time, besides the classic competition. Also, for this special occasion, a *Best Fundamental Paper* award was assigned to a paper that dramatically influenced graph drawing research for at least 20 years. The awarded paper was "How to Draw a Grap" by W. T. Tutte (Proc. London Math. Soc., Third Series 13:743–767, 1963).

A workshop on the Theory and Practice of Graph Drawing was held on September 18, in conjunction with GD 2012, to celebrate Prof. Peter 60th birthday. We warmly thank the Chairs and the organizers of this workshop for the very nice and interesting initiative. A report is included in these proceedings.

Many people contributed to the success of GD 2012. Special thanks go to the authors of submitted papers and posters, and to the members of the Pro-

gram Committee and the external reviewers who worked hard to select the best submissions. Thanks to the Graph Drawing Contest Committee and to the Best Fundamental Paper Award Committee for their valuable contribution. Special thanks are also due to the Chair of the Organizing Committee, Lev Nachmanson, and to the other Organizing Committee members, Tim Dwyer, Bongshin Lee, and Nathalie Henry Riche for their wonderful job. And we cannot forget Emilio Di Giacomo, who was a great Publicity Chair. Finally, we are very grateful to the industrial sponsors of GD 2012: the "gold" sponsor, Tom Sawyer Software; the "silver" sponsors, Microsoft, Vis4, and YWorks; the "bronze" sponsor, AT&T. Without their generous financial support the conference would have been impossible to organize.

The 21st International Symposium on Graph Drawing (GD 2013) will be held in Bordeaux, France, September 23-25, 2013, with Alexander Wolff and Stephen Wismath as Program Committee Chairs and David Auber as the Organizing Committee Chair.

November 2012

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