

Preface

This volume contains the papers presented at the 23rd International Symposium on Graph Drawing and Network Visualization (GD 2015), which took place September 24–26, 2015, in Los Angeles, California, USA. The conference was hosted by California State University at Northridge, with Csaba Tóth as chair of the Organizing Committee. A total of 86 participants from 12 countries attended the conference.

This year the symposium added “Network Visualization” to its name to better emphasize the focus of the conference both on the combinatorial and algorithmic aspects of graph drawing, and on the design of visualization systems and interfaces.

Paper submissions were divided into three tracks plus a poster track: Track 1 for combinatorial and algorithmic aspects; Track 2 for experimental, applied, and network visualization aspects; and Track 3 for shorter notes and demos. All tracks were handled by a single Program Committee. The total number of submissions was 77 papers and nine posters. At least three Program Committee members reviewed each submission and the Program Committee then accepted 42 papers and eight posters, for acceptance rates of 24/42 in Track 1, 11/22 in Track 2, 7/13 in Track 3, and 8/9 posters. In addition to the papers, these proceedings include a two-page description of each poster.

GD 2015 was preceded by a two-day graduate workshop on “Recent Trends in Graph Drawing: Curves, Graphs, and Intersections.” A report about the workshop is included in the proceedings.

There were two invited talks at GD 2015. Herbert Edelsbrunner of the Institute of Science and Technology, Austria, talked about “Shape, Homology, Persistence, and Stability.” Kwan-Liu Ma of the University of California at Davis, USA, talked about “Emerging Topics in Network Visualization.” Abstracts of both talks are included in these proceedings.

Springer sponsored awards for best paper in each of Track 1 and Track 2, plus a best presentation award and a best poster award. The Program Committee voted to give the best paper award in Track 1 to “Drawing Graphs Using a Small Number of Obstacles,” by M. Balko, J. Cibulka, and P. Valtr, and in Track 2 to “An Incremental Layout Method for Visualizing Online Dynamic Graphs,” by T. Crnovrsanin, J. Chu, and K.-L. Ma. The participants of the conference voted to give the best presentation award to M. Löffler for his presentation of the paper “Realization of Simply Connected Polygonal Linkages and Recognition of Unit Disk Contact Trees” and the best poster award to P. Angelini, G. Da Lozzo, G. Di Battista, F. Frati, M. Patrignani, and I. Rutter for their poster entitled “On the Relationship Between Map Graphs and Clique Planar Graphs.”

Following tradition, the 22nd Annual Graph Drawing Contest was held during the conference. The contest had two parts, each with two categories: Creative Topics (Graph Classes and Tic Tac Toe) and Live Challenge (Automatic Category and Manual Category). Awards were made in each of the four categories. A report about the contest is included in the proceedings.

Many people and organizations contributed to the success of GD 2015. We thank the Program Committee members and the additional reviewers for carefully reviewing the submitted papers and posters and for putting together a strong and interesting program. Thanks to all the authors for choosing GD 2015 as the publication venue for their research.

We warmly thank the Organizing Committee, Bernardo Ábrego, Silvia Fernández-Merchant, Csaba Tóth, and all the volunteers from the California State University at Northridge, who put a lot of time and effort into the organization of GD 2015. This year's Contest Committee was chaired by Maarten Löffler, Utrecht University. We thank the committee for preparing interesting and challenging problems.

GD 2015 thanks its sponsors, “diamond” sponsor California State University at Northridge, “gold” sponsors Tom Sawyer Software and yWorks, “silver” sponsor Microsoft, and “bronze” sponsor Springer. Their generous support helps ensure the continued success of this conference.

The 24th International Symposium on Graph Drawing and Network Visualization (GD 2016) will take place September 19–21, 2016, in Athens, Greece. Yifan Hu and Martin Nöllenberg will co-chair the Program Committee, and Antonios Symvonis will chair the Organizing Committee.

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