

Call for Papers – GD 2016

24th International Symposium on Graph Drawing and Network Visualization September 19-21, 2016 – Athens, Greece http://algo.math.ntua.gr/~gd2016/

Graph Drawing is concerned with the geometric representation of graphs and constitutes the algorithmic core of **Network Visualization**. Graph Drawing and Network Visualization are motivated by applications where it is crucial to visually analyze and interact with relational datasets. Examples of such application areas include data science, social sciences, Web computing, information systems, biology, geography, business intelligence, information security and software engineering.

GD has been the main annual event in this area for more than 20 years. Its focus is on combinatorial and algorithmic aspects of graph drawing as well as the design of network visualization systems and interfaces. GD 2016 will be hosted by the **Institute of Communications and Computer Systems, an affiliate of the National Technical University of Athens** from **September 19 to 21, 2016** in **Athens, Greece**. Researchers and practitioners working on any aspect of graph drawing and network visualization are invited to contribute papers and posters and to participate in the symposium and the graph drawing contest.

Papers

We invite authors to submit papers describing original research of theoretical or practical significance to graph drawing and network visualization. Regular papers must be submitted explicitly to one of two distinct tracks. Papers submitted to one track will not compete with papers submitted to the other track.

Track 1: Combinatorial and algorithmic aspects

This track is mainly devoted to fundamental graph drawing advances, such as combinatorial aspects and algorithm design. The range of topics for this track includes (but is not limited to):

- Design and analysis of graph drawing algorithms
- Geometric graph theory
- Geometric computing
- Planarity and topological graph theory
- Optimization on graphs

Track 2: Experimental, applied, and network visualization aspects

This track is mainly devoted to the practical aspects of graph drawing, such as the development of network visualization systems and interfaces in different application areas. The range of topics for this track includes (but is not limited to):

- Visualization of graphs and networks in real world applications, including big data
- Engineering of network visualization algorithms and systems
- Experimental results in graph theory and algorithms
- Benchmarks and experimental studies of network visualization systems and user interfaces
- Cognitive studies on graph drawing readability and user interaction
- Interfaces and methods for interacting with graphs

Short papers

Besides regular papers in the two tracks above there will be a separate category for short papers. In this category it will be possible to submit theoretical contributions and applied papers of shorter length. Papers in this category will be assigned a shorter time for presentation during the conference.

Demos

Authors of applied regular and short papers will have the opportunity to show a demo of their software/system during the poster session.

Submission format

All submissions must be formatted using the LaTeX style file for the conference series Lecture Notes in Computer Science (LNCS) provided by Springer. The default margins and fonts must not be modified. Submissions that do not comply with this format risk being rejected. The length of regular papers is limited to 12 pages (excluding references), while the length of short papers is limited to 6 pages (excluding references). The claims of the paper should be fully substantiated, including full proofs or appropriate experimental data. If this information does not fit within the page limits, the authors should include it in a clearly marked appendix, whose length is not constrained and which the reviewers may read at their own discretion.

Posters

Submissions of posters on graph drawing, network visualization, and related areas are also solicited. The poster session will provide a forum for the communication of late-breaking research results (which may also appear elsewhere) to the graph drawing community. Authors of posters should prepare an abstract (up to two pages in the LNCS style) that must be submitted together with the poster itself.

Contest

Details about the traditional Graph Drawing Contest held at the conference will be provided on the conference Web site.

Publication

All accepted papers will appear in the conference proceedings, published by Springer in the Lecture Notes in Computer Science (LNCS) series and, following a green open access policy, as a conference index on the arXiv repository. The LNCS proceedings will be made freely accessible to the GD community upon publication and openly accessible to anyone after four years. The self-archived arXiv proceedings will provide immediate and unrestricted open access. Twelve pages (excluding references) will be allocated for regular papers and six pages (excluding references) for short papers. Upon submission of the camera-ready version of accepted papers, the identical paper (optionally including a clearly marked appendix) must be submitted to the arXiv repository and its arXiv identifier must be specified for inclusion in the conference index. For each paper, an author must register and present the paper at the conference (baring unforeseen circumstances) otherwise the paper will not be included in the proceedings. Abstracts of accepted posters will also appear in the conference proceedings (two pages), but will not be made available for indexing. Selected papers will be invited for submission to a special issue of the Journal of Graph Algorithms and Applications.

Awards

For each of the two tracks, the Program Committee of GD 2016 will give a Best Paper Award. In addition, to recognize the effort of participants to present their work and to prepare their posters in a clear and elegant way, there will be a Best Presentation Award and a Best Poster Award voted on by the GD 2016 attendees.

Important Dates

Paper submission deadline Notification of paper acceptance Poster submission deadline Notification of poster acceptance **Final versions due Contest submission deadline** Symposium on Graph Drawing and Network Visualization

Invited Speakers

Daniel Keim, University of Konstanz, DE

Program Committee

Patrizio Angelini, University of Tübingen, DE Therese Biedl, University of Waterloo, CA Walter Didimo, University of Perugia, IT Cody Dunne, IBM Watson Health, USA David Eppstein, UC Irvine, USA Jean-Daniel Fekete, INRIA, FR Stefan Felsner, TU Berlin, DE Radoslav Fulek, IST Austria, AT Emden Gansner, Google, USA Yifan Hu (co-chair), Yahoo Labs, USA Karsten Klein, Monash University, AU Stephen Kobourov, University of Arizona, USA Marc van Kreveld, Utrecht University, NL

Organizing Committee

Kostas Karpouzis, National Tech. Univ. of Athens, GR Chrysanthi Raftopoulou, National Tech. Univ. of Athens, GR Ioannis Tollis, University of Crete and ICS-FORTH, GR

Contest Committee

Philipp Kindermann, University of Hagen, DE Maarten Löffler (chair), Utrecht University, NL June 12 (23:59 PDT) Julv 24 August 17 (23:59 PDT) August 28 September 1 September 11 September 19-21

Roger Wattenhofer, ETH Zurich, CH

Jan Kynčl, Charles University Prague, CZ Kwan-Liu Ma, UC Davis, USA Tamara Mchedlidze, Karlsruhe Institute of Technology, DE Martin Nöllenburg (co-chair), TU Vienna, AT Stephen North, Infovisible, Oldwick, USA Maurizio Patrignani, Roma Tre University, IT Helen Purchase, University of Glasgow, UK Huamin Ou, HKUST, Hong Kong Günter Rote, FU Berlin, DE André Schulz, University of Hagen, DE Lei Shi, Chinese Academy of Science, CN Alexandru Telea, University of Groningen, NL

Antonios Symvonis (chair), National Tech. Univ. of Athens, GR

Lev Nachmanson, Microsoft Research, USA Ignaz Rutter, Karlsruhe Institute of Technology, DE