Call for Papers – GD 2018

26th International Symposium on

Graph Drawing and Network Visualization

September 26-28, 2018 - Barcelona, Spain

http://dccg.upc.edu/gd2018/

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, or 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 2018 will take place **September 26-28, 2018** at the **Universitat Politècnica de Catalunya** in **Barcelona, Spain**. Researchers and practitioners working on any aspects 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

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

Short papers

In addition to the above two tracks, there will be a separate category for short papers, describing theoretical or applied contributions of shorter length. Papers in this category will be assigned a shorter time for presentation during the conference.

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; in particular, the use of packages such as *times.sty* is not allowed. Submissions that do not comply with this format risk rejection without consideration of their merits. 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. 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. Authors must submit the complete paper (including the appendix) by the deadline. Minor updates will be allowed for 2 days following the deadline. All submissions will be handled through EasyChair at the web site

https://easychair.org/conferences/?conf=gd18

Posters & Contest

Submissions of posters on graph drawing, network visualization, and related areas are solicited. The poster session will provide a forum for the communication of late-breaking research results (which may also appear elsewhere) to the GD community. Authors of posters should prepare an abstract (up to 2 pages in the LNCS style) that must be submitted together with the poster itself.

Details about the traditional **Graph Drawing Contest** held at the conference are provided on the conference web site.

Publication

All accepted papers (including the two-page poster abstracts) will appear in the conference proceedings, published by **Springer** in the **Lecture Notes in Computer Science (LNCS)** series. Twelve pages (excluding references) will be allocated for regular papers and six pages (excluding references) for short papers. The LNCS proceedings will be made freely accessible to the GD community upon publication and openly accessible to anyone after four years.

Authors will be required to submit their accepted papers to the **arXiv repository**, in order to provide immediate and unrestricted open access to them. The self-archived arXiv papers shall consist of the LNCS proceedings version (identical, except for possibly changed references to the appendix resp. the arXiv version) plus an optional clearly marked appendix. This appendix could contain a long version of the entire paper or proofs that have been omitted from the main text. Subsequent submissions of different versions of the paper to the arXiv (known as arXiv ``replacements'') are allowed. Upon submission of the camera-ready version of an accepted paper, the authors will be required to specify the arXiv identifier associated with the paper for inclusion in a **conference index**, which will be also published in the arXiv repository. Failure to comply with these guidelines will impede the publication of the paper.

Each paper or poster must be presented at the conference by an author (barring unforeseen circumstances), otherwise the paper will not be included in the proceedings. Should any visa restriction prevent an author from attending the conference and presenting a paper, he/she will be given ways to participate and give the talk via electronic means.

Selected papers from both tracks will be invited for submission to a special issue of the **Journal of Graph Algorithms and Applications (JGAA)**. The authors of the best paper in Track 2 will be invited to submit a substantially extended and enhanced version of their work to **IEEE Transactions on Visualization and Computer Graphics (TVCG)**.

Important Dates

Paper submission deadline	June 10 (23:59 PDT) – Updates possible until June 12 (23:59 PDT)
Notification of paper acceptance	July 20
Poster submission deadline	August 12 (23:59 PDT)
Notification of poster acceptance	August 24
Final versions due	September 3
Contest submission deadline	September 15 (23:59 PDT)
Symposium	September 26-28

Invited Speakers

Bojan Mohar, Simon Fraser University, CA

Alexandru C. Telea, University of Groningen, NL

Program Committee

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