CALL for PAPERS and DEMOS

GRAPH DRAWING '97

Rome, Italy, September 18 - 20, 1997

Graph Drawing '97 (GD '97) will be held at the Third University of Rome, Rome, Italy, September 18 - 20, 1997. The symposium is a forum for researchers, practitioners, developers and users working on all aspects of graph drawing. The aim is to present recent research results, to demonstrate systems for graph drawing and to explore directions for future research and new applications. It is anticipated that the symposium will further collaborative efforts between computer scientists, mathematicians, and applied researchers, both from academia and industry.

GD '97 follows the GD '96 MSRI Symposium in Berkeley, the GD '95 Symposium in Passau, the GD '94 DIMACS Workshop in Princeton, the GD '93 ALCOM Workshop in Paris and the GD '92 Work Meeting in Rome.

Scope: Graph drawing addresses the problem of visualizing structural information. More specifically it is concerned with the construction of geometric representations of abstract graphs and networks. The automatic generation of drawings of graphs has important applications in key computer science technologies such as database design, software engineering, VLSI and network design and visual interfaces and also in engineering, chemistry and biology. The range of issues being investigated in graph drawing includes algorithms, graph theory, order theory, visual languages.

A great deal of research in graph drawing is motivated by applications to systems for viewing and interacting with graphs. The interaction between theoretical advances and implemented solutions is an important part of the area of graph drawing.

Conference Sponsor The Fifth Symposium on Graph Drawing is sponsored by the EC ESPRIT Long Term Research Project .

Call for Papers: Papers describing original research and surveys addressing open problems and new applications are being sought. Topics of interest include but are not limited to:

- Algorithms, models, and techniques for drawing graphs, such as partitioning, layering, orientation, planarization, dynamic layout restructuring, graph grammars and declarative specifications.
- Drawing algorithms for specific classes of graphs, such as trees, directed graphs, planar graphs and order digraphs.
- Applications of graph drawing in other areas such as software visualization, user interfaces, database queries, information browsers, web browsers, and computer aided instruction.
- Concepts for visualizations of structural information.
- Tools and systems for graph drawing.
- Geometric graph theory; 2- and 3-dimensional representations of graphs and hypergraphs by geometric relations, such as visibility, proximity, intersection and inclusion.
- Topological graph theory; combinatorial issues, such as planarity, orientations and orders.

Call for Demos: Submissions of demos are solicited. Areas of interest include, but are not limited to:

- Mathematical visualization of graphs.
- Graph-based software visualization and software engineering applications.
- Database visualization with graphs and hypergraphs.
- Programming environments for graphs and their layouts.
- Algorithm animation with graphs.
- User interfaces for viewing graphs, e.g., interactive exploration of large graphs and presentation of dynamic graphs.
- Client-server applications for graph drawing.
- WWW visualization.

Program Committee: Giuseppe Di Battista (Univ. Rome III, Italy) Hubert de Fraysseix (CNRS, France), Mike Goodrich (The John Hopkins University, USA) Jan Kratochvíl (Charles Univ., Prague, Czech Republic), Joe Marks (Mitsubishi Electric Research Labs, USA), Petra Mutzel (MPI-Saarbrücken, Germany) Stephen North (AT&T Bell Laboratories, USA) Tom Shermer (Simon Fraser University, Canada) Kozo Sugiyama (Fujitsu Labs. Ltd., Japan) Roberto Tamassia (Brown University, USA)

Organizing Committee: Paola Bertolazzi (IASI, Italy) Giuseppe Liotta (Univ. Rome "La Sapienza", Italy) Maurizio Patrignani (Univ. Rome III, Italy) Francesco Vargiu (AIPA, Italy)

Submission of Papers and Demos: The program committee invites submissions of papers (6 - 12 page extended abstract) and demos (2 - 6 page abstract, descriptive screen dumps, and a list of hardware needed). E-mail submissions (in postscript or plain text) are encouraged. Please submit to gd97@inf.uniroma3.it. Hard copy submissions (10 copies) are also accepted and should be sent to the chairperson of the program committee:

Prof. Giuseppe Di Battista
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Via della Vasca Navale 84
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The deadline for submissions is **May 30, 1997**. Notification of acceptance or rejection will be done by email before **July 14, 1997**.

Proceedings Accepted papers and descriptions of accepted demos will be published in the proceedings of GD'97, which will appear in the series Lecture Notes in Computer Science of Springer Verlag. Camera-ready copies of papers are due at the workshop.

Fellowships A limited number of fellowships are available for students. The deadline to apply for fellowships is July 18, 1997.

For further information about Graph Drawing '97 contact the chairperson by email at `gd97@inf.uniroma3.it` or see `http://www.inf.uniroma3.it/calendar/gd97/`.