Call for Papers

With this call for papers, we invite the active participation in <u>EuroVis 2013</u> with the presentation of high-quality visualization research. EuroVis 2013 will be held in Leipzig, Germany, June 17-21, 2013.

EuroVis 2013 is the 15th annual scientific gathering on visualization jointly organized by the Eurographics Working Group on Data Visualization and the IEEE Visualization and Graphics Technical Committee. Based on the continued growth and success of the event, EuroVis will be a conference for the second time.

Papers accepted for EuroVis 2013 are published in a special issue of Computer Graphics Forum, the International Journal of the Eurographics Association, after a two-stage peer-reviewing process. Submissions should be 9 pages (at most), excluding references, and 10 pages (at most), in total.

For papers that have previously been reviewed for other venues and have been rejected or withdrawn, the authors can provide a cover letter describing the changes they have made to comply with reviewers' comments and requests. This procedure is strongly recommended and it is meant to improve the efficiency of the reviewing process but does not imply reviewer continuity. The cover letter has to be submitted as an 'Additional Material'.

Following the success of the short paper track introduced last year, we will continue with this format. Short papers will be electronically archived fully citable publications limited to 4 pages plus one page of references and will receive oral presentations at the conference. The purpose of this track is to promote, in addition to other research, late-breaking results, technical contributions, and work in progress.

Please note that we encourage authors of short papers on workshop topics to submit to the respective workshop. We invite researchers in all areas of visualization to submit full papers to EuroVis.

Important Dates

• Full Paper Abstracts: November 30, 2012

• **Full Papers:** December 9, 2012

• Short Papers for Conference and Workshops: March 8, 2013

• Conference Dates: June 17-21, 2013

Suggested topics for research papers include, but are not limited to:

- Visualization Taxonomies and Models
- Non-Spatial Data: visualization of graphs and trees, high-dimensional data, dimensionality reduction for visualization, ambient information in visualization, text and document visualization, and the visualization of time series data
- Large Data Visualization: visualization of time-varying data, streams, compression techniques, parallel and distributed visualization, scalability, visualization over networks, visualization hardware and acceleration techniques
- Spatial Data in Visualization: visualization of scalar, vector, and tensor fields, multi-field, multi-variate, and multi-dimensional visualization, multi-resolution techniques, visualization of irregular and unstructured grid data, geographic data, and molecular data
- **Visualization Techniques:** metrical, geometrical, topological, pixel-oriented, point-based, volume-based, icon-/glyph-based, graph-based, feature-based, hierarchical, illustrative, view-dependent, focus+context, statistical, and animated visualization techniques

- Visual Analytics, Visual Data Mining, and Knowledge Discovery: in particular the integration of computational approaches with interactive visualization, visualization for exploration, analysis, and presentation
- **Interaction:** human-computer interaction for visualization, interaction design, zooming and navigation, linking & brushing, coordinated multiple views, data editing, manipulation, and deformation, guided visualization and interactive visual storytelling
- Evaluation and User Studies: task and requirements analysis, metrics and benchmarks, qualitative evaluation, quantitative evaluation, laboratory studies, field studies, usability studies
- **Application Areas of Visualization:** in the physical sciences, bioinformatics and in life sciences, and in engineering, geographic and earth/space/environmental visualization, information sciences, software and financial visualization, and applications in the humanities, social sciences, and education
- General Topics: visual design, cognition, perception, and aesthetics, uncertainty, design studies, novel algorithms and mathematics, presentation/production/dissemination, collaborative and distributed visualization, mobile/ubiquitous visualization, visualization systems, problem-solving environments, virtual environments, sonification and haptics, visualization for the masses

Conference Chair

• Gerik Scheuermann, University of Leipzig, Germany

Paper Co-Chairs

- Bernhard Preim, Otto-von-Guericke University, Magdeburg, Germany
- Penny Rheingans, University of Maryland, Baltimore, United States
- Holger Theisel, Otto-von-Guericke University, Magdeburg, Germany

Short Paper Co-Chairs

- Mario Hlawitschka, *University of Leipzig, Germany*
- Tino Weinkauf, Max Planck Institute for Informatics, Germany

Co-located Event: EuroVA 2013 (www.eurova.org)

EuroVA 2013 is the fourth international EuroVis workshop on visual analytics. The goal of the workshop is to promote and advance the combination and integration of visualization and analytics methods for the purpose of problem solving in a variety of application domains including engineering, business, public policy, medicine, security, etc. Topics of interest include: visual analysis processes and workflows, visual representations and interaction techniques, data management and knowledge representation, data analysis and machine learning, cognitive and perceptual aspects, infrastructure and evaluation. EuroVA 2013 will be held on June 17-18, 2013, in Leipzig, Germany, co-located with the EuroVis 2013 conference. The short papers will be published as part of electronic proceedings. A selection of the best short papers will be invited to extend to full papers and submit to a special issue of Computers & Graphics, Dec. 2013.

Workshop Dates

• Short Paper Submission: March 8, 2013

• Workshop: June 17-18, 2013

Workshop Chairs

• Margit Pohl, TU Vienna, Austria

• Heidi Schumann, University of Rostock, Germany

Co-located Event: EnvirVis 2013

The first workshop on "Visualization in Environmental Sciences" (EnvirVis) focuses on visualization research and applications in environmental sciences. Researchers in environmental sciences are faced with tremendously heterogeneous data sets, ranging in spatial scales from micrometers to thousands of kilometers and varying on time scales from milliseconds to millions of years. The workshop invites both contributions in the fields of scientific visualization and visual data integration with a broad application area in environmental research. Applications topics include **Geosciences**, **Hydrology**, **Soil and Groundwater Research**, **Climate Research**, **Waste management**, and **Biodiversity**. We will edit a topical issue of the ISI Journal Environmental Earth Sciences (EES) based on the best contributions to the workshop.

Workshop Dates

• Short Paper Submission: March 8, 2013

• Workshop: June 17-18, 2013

• EES Topical Issue Submission: August 31, 2013

Workshop Chairs

• Olaf Kolditz, Helmholtz Center for Environmental Sciences, Leipzig, Germany

• Gerik Scheuermann, University of Leipzig, Germany

Co-located Event: EuroRV³ 2013 (www.eurorvvv.org)

The EuroVis Workshop on Reproducibility, Verification, and Validation in Visualization (EuroRV^3) focuses on the need for reliable, verified and validated visualization. We concentrate on recent and future developments related to the reproducibility of newly developed visualization approaches, the verification of visualization and data-processing systems, the validation of visualization paradigms, and the effective incorporation of each of these into modern visualizations. This workshop solicits short papers and panel statements that address the core questions of the field of reliability in visualization. The short papers will be published as part of electronic proceedings.

A selection of the best short papers will be invited to extend to full papers and submit to a special issue of Computers and Visualization in Simulation (CVS). Panel proposals describe the topic to be addressed and identify the prospective panelists. Each panelist includes a short position statement on the topic and a short biography, the total of which is limited to 500 words for each panelist, up to a maximum of two pages for the whole panel.

Workshop Dates

- Short Papers and Panel Proposals: March 8, 2013
- Workshop: June 17-18, 2013

Workshop Chairs

- Paul Rosenthal, Chemnitz University of Technology, Germany
- Robert (Bob) S. Laramee, Swansea University, UK
- Robert M. (Mike) Kirby, University of Utah, US
- Gordon Kindlmann, University of Chicago, US

Co-Located Event: VMLS 2013

The third international workshop on Visualization in Medicine and Life Sciences will take place in 2013 (VMLS 2013). After two successful events in 2006 and 2009, VMLS 2013 will, for the first time, be co-located with EuroVis. The goal of the workshop is to discuss novel visualization techniques driven by the needs in medicine and life sciences as well as new application areas and challenges for visualization within these fields. VMLS 2013 intends to generate ideas and concepts for visual analysis of data from scientific studies of living organs or to the delivery of healthcare. Target scientific domains include the entire field of biology at all scales - from genes and proteins to organs and populations - as well as interdisciplinary research based on technological advances such as bioinformatics, biomedicine, biochemistry, or biophysics. Moreover, they comprise the field of medicine and the application of science and technology to healthcare problems. The workshop will be organized in form of presentation sessions of invited and contributed talks and will allocate a significant amount of time to vivid discussions.

Workshop Dates

• Short Paper Submission: March 8, 2013

• Workshop: June 17-18, 2013

Workshop Chairs

- Lars Linsen, Jacobs University Bremen, Germany
- Hans-Christian Hege, ZIB, Germany
- Bernd Hamann, University of California at Davis, USA

Co-Located Event: VAMP 2013

VAMP 2013 is the first international workshop on Visual Analytics using Multidimensional Projections. At the crossroad of Information Visualization, Machine Learning and Graph Drawing, the workshop will focus on issues that embedding techniques should address to bridge the gap with the analysts and get out of the laboratories. VAMP 2013 will be held on June 19, 2013, in Leipzig, Germany, co-located with the EuroVis 2013 conference.

Workshop Dates

• Short Paper Submission: March 8, 2013

• Workshop: June 19, 2013

Workshop Chairs

- Michael Aupetit, CEA LIST, France
- Laurens van der Maaten, Delft University of Technology, The Netherlands