



## CALL FOR PARTICIPATION

October 24 • October 29, 1999  
San Francisco Airport Hyatt  
San Francisco, California



Sponsored by IEEE Computer Society Technical Committee on  
Visualization and Graphics In Cooperation with ACM SIGGRAPH

### IEEE Visualization 1999 Celebrating Ten Years



**VISUALIZATION** is a vital research and applications frontier shared by a variety of science, medical, engineering, business, and entertainment fields. The tenth IEEE Visualization conference focuses on interdisciplinary methods. Collaboration among developers and users of visualization methods across all of science, engineering, medicine, and commerce is addressed at Visualization '99. Sunday through Tuesday of Conference Week will include tutorials, symposia, and mini-workshops. Papers, panels, case studies, and late-breaking hot topics will be presented Wednesday through Friday.

We invite you to participate in IEEE Visualization '99 by submitting your original research through papers, panels, case studies, late breaking hot topics, and demonstrations. Share your perspectives through panels and workshops, or your experience through tutorials. Please select the forum appropriate to your submission, where it will be considered by your peers for presentation. Particular focuses on parallel techniques in visualization and information visualization are addressed in special two-day symposia.

*For further information on the conference or symposia contact:*

**Steve Bryson**, Conference Co-Chair, NASA Ames Research Center • 650-604-4524 • Fax: 650-604-3957 • bryson@nas.nasa.gov

**Theresa-Marie Rhyne**, Conference Co-Chair, Lockheed Martin/US EPA Scientific Visualization Center • 919-541-0207 • Fax: 919-541-0056 • trhyne@vislab.epa.gov

See the conference web page for complete up-to-date information and submission details at <http://www.erc.msstate.edu/vis99>

The three conference tracks cover:

<b>Visualization Algorithms</b>	<i>Volume Rendering, Flow Visualization, Isosurfaces, Compression, Vector and Tensor Visualization, Sonification, etc.</i>
<b>Visualization Techniques</b>	<i>Information Visualization, Databases, Human Perception, Human Factors, Multi-Variate Visualization, Virtual Reality, etc.</i>
<b>Visualization Applications</b>	<i>Archaeology, Astrophysics, Aerospace, Automotive, Biomedicine, Chemistry, Education, Electronics, Environment, Finance, Mathematics, Mechanics, Molecular Biology, Physics, Virtual Reality, WWW, Java, VRML, HTML, AVS, Data Explorer, Iris Explorer, Khoros, etc.</i>

## IMPORTANT DATES

<b>March 31:</b>	Conference papers, Panels, Case Studies, Tutorials, Mini-Workshops, BOF proposals, InfoVis '99 papers, and PVG '99 papers due
<b>May 30:</b>	Conference papers, Panels, Case Studies, Tutorials, Mini-Workshops, BOF proposals, and InfoVis '99, and PVG '99 selections announced
<b>June 15:</b>	Conference Late Breaking Hot Topics and Demonstration proposals due
<b>July 1:</b>	InfoVis '99 Late Breaking Hot Topics papers due
<b>July 15:</b>	Final Conference papers, final InfoVis '99 papers, and PVG '99 papers due to publisher
<b>August 1:</b>	Conference Late Breaking Hot Topics selections announced
<b>August 21:</b>	Conference Late Breaking Hot Topics final papers due to publisher
<b>August 31:</b>	Conference Late Breaking Hot Topics video submissions due
<b>September 25:</b>	<i>Close of Early Registration</i>
<b>October 24:</b>	<i>Conference Commences</i>
<b>October 25:</b>	<i>InfoVis '99 and PVG '99 Commence</i>

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## Conference Papers *(due March 31, 1999)*

Papers are solicited that present research results related to all areas of visualization. Original papers are limited to 5,000 words. The submission of NTSC VHS video (up to 5 minutes in length) to accompany the paper is strongly recommended. Please submit 7 copies of all materials to Bernd Hamann (at the address below). Accepted papers will be included in the conference proceedings; the videos will be included in the conference video proceedings. In addition, we must receive, by submission deadline, a complete paper submission form. Paper submissions (hard copy only) should be sent to **Bernd Hamann**, Center for Image Processing and Integrated Computing, 2343 Academic Surge Building, One Shields Avenue, University of California, Davis, CA 95616-8553, USA • 530-754-9157 • hamann@cs.ucdavis.edu

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## Panel Proposals *(due March 31, 1999)*

Panels should address the most important issues in visualization today. Panel proposals should describe the topic to be addressed and identify the prospective panelists. Each panelist should include a position statement on the topic and a short biography (limit 500 words for both per panelist). The statements will be included in the conference proceedings. Panel proposals (hard copy or email) should be sent to **J. Edward Swan**, Naval Research Laboratory, Code 5580, 4555 Overlook Ave. SW, Washington, D.C. 20375, USA • 202-404-4984 • Fax: 202-767-1122 • swan@ait.nrl.navy.mil

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## Case Study Papers *(due March 31, 1999)*

Case studies are reports on how visualization has contributed to the analysis of data. They may have an application focus or relate to the visualization process. Possible application areas include physical, life, social and information sciences, engineering, and commerce. An emphasis on lessons learned from practical experience is strongly encouraged, particularly where visualization has been employed in a real, working environment. A short paper limited to 2500 words (maximum 4 pages B/W plus 1 page color) will be included in the conference proceedings. Images and/or NTSC VHS video to accompany the paper are recommended; the video will be included in the conference video proceedings. Submit six copies of all materials. Case study submissions (hard copy only) should be sent to **David Kao**, NASA Ames Research Center, M/S T27A-2, Moffett Field, CA 94035-1000, USA davidkao@nas.nasa.gov

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## Late Breaking Hot Topics Papers *(due June 15, 1999)*

Submissions will be accepted on Late Breaking Hot Topics that pertain to all areas of Visualization. These submissions must be original, may show work in progress, and may not exceed 2,500 words or a maximum of 4 pages including images. Images and/or NTSC VHS video to accompany the paper are recommended; the video will be included in the conference video proceedings. Accepted papers will be published and distributed at the conference. Authors of accepted papers will have an opportunity to submit a revised paper. Submissions will be done

electronically. Submission details can be found at the conference web site or by contracting Craig Wittenbrink at craig\_wittenbrink@hpl.hp.com Videotapes should be sent to **Craig M. Wittenbrink**, Hewlett-Packard Laboratories, 1501 Page Mill Rd, MS3U-4, Palo Alto, CA 94304-1126, USA • 650-857-2329 • Fax: 650-852-3791

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## Tutorial Proposals *(due March 31, 1999)*

Tutorials are full or half-day presentations designed to cover specific visualization methods or application areas in depth. Subjects can include, but are not limited to, standard visualization techniques, existing languages or toolkits, mathematical fundamentals, databases, usability analysis, or commercialization of software. It is the intention of the Vis '99 tutorial committee to provide one classroom equipped with workstations for hands-on instruction. Tutorials proposing to use this interactive classroom should clearly state this preference, and also how the course is designed for this setting. For more detailed information concerning submission and format content, see the conference web site, or contact **Kelly Gaither**, Mississippi State University, P.O. Box 9627, Mississippi State University, MS 39762, USA • 601-325-2067 • Fax: 601-325-7692 kelly@erc.msstate.edu

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## Mini-Workshop and Birds-of-a-Feather Proposals *(due March 31, 1999)*

Proposals may be submitted for Mini-Workshops and evening Birds-Of-A-Feather (BOF) gatherings on visualization methods or application areas. They should deal with state-of-the-art topics and involve experts in the field. Proposals devoted to a particular discipline's methods and needs are encouraged. Mini-Workshop and Birds-of-a-Feather Proposals (hard copy or email) should be sent to **Rob Erbacher**, University of Idaho, Department of Computer Science, Moscow, ID 83844-1010, USA erbacher@cs.uidaho.edu

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## Demonstration Proposals *(due June 15, 1999)*

Visualization '99 is a unique opportunity to present your products or research to visualization experts from a wide variety of fields. We invite demonstrations of commercial hardware, software, integrated systems, peripherals, literature, as well as academic research. We encourage demonstrators to have technical representatives in attendance. For more information on participating in Visualization '99 demonstrations, contact **Upul Obeysekare** at obey@ctc.com

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## Creative Applications Lab *(due July 15, 1999)*

The Creative Applications Lab (CAL) is designed to let Visualization '99 attendees run their software to show off their latest work. CAL will have a variety of computers available. For details on participating in the CAL, see the conference web site or contact **Kelly Gaither** at 601-325-2067 • kelly@erc.msstate.edu

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# PARALLEL VISUALIZATION AND GRAPHICS SYMPOSIUM (PVG '99)

Co-sponsored by the IEEE Computer Society and ACM/SIGGRAPH

October 25-26, 1999 ■ San Francisco Airport Hyatt ■ San Francisco, California

The First Parallel Visualization and Graphics Symposium (the successor to the Parallel Rendering Symposium) will be held October 1999 in conjunction with IEEE Visualization '99. Papers and case studies containing original work in all areas of parallel visualization and graphics are solicited. Case studies describe how parallel visualization and graphics techniques have contributed to achieving a concrete objective for a specific application. Of special interest are submissions on using clusters of commodity PCs and graphics cards for high-performance visualization and graphics tasks.

Suggested topics include:

- Visualization algorithms
- Graphics algorithms
- Frameworks and application programmer interfaces
- Load balancing, scheduling
- Hardware and software architectures
- Performance modeling and analysis
- Real-time systems for 3D virtual reality
- Internet-based visualization
- Visualizing extremely large datasets
- High-performance computation/visualization environments

**Submissions:** The deadline for submissions is March 31, 1999. Final papers will be limited to 8 proceedings pages plus one page of color figures. Case studies are limited to four proceeding pages plus one page of color figures. To submit a contribution, e-mail your submission in compressed postscript format to: [hwshen@nas.nasa.gov](mailto:hwshen@nas.nasa.gov).

Please specify the type of submission in the subject line of your e-mail (PAPER or CASE STUDY). In addition, please send five copies of any accompanying NTSC video to the following postal address:

**Han-Wei Shen** • NASA Ames Research Center • Mail Stop T27A-2  
Moffett Field, CA 94035 • 650-604-4451

URL: <http://www.acl.lanl.gov/PVG99/pvg99.html>

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# IEEE SYMPOSIUM ON INFORMATION VISUALIZATION (INFOVIS '99)

Sponsored by the IEEE Computer Society Technical Committee on Visualization and Graphics

October 25-26, 1999 ■ San Francisco Airport Hyatt ■ San Francisco, California

InfoVis '99, the fifth Information Visualization Symposium, will be held to focus on the rapidly growing area of information visualization. Increasing amounts of data and information and the availability of fast digital network access are creating a rapidly growing demand for accessing, querying and retrieving information and data. However, information technology will not transform business, science, medicine, engineering, and education if users cannot use it easily and efficiently. Technology must come to the users, taking their needs into account. If we do not involve the users, we will develop useless systems. InfoVis '99 will focus on all aspects of information visualization and human-centered information interfaces, and on ways in which advances in interactive computer graphics hardware, mass storage, and data visualization can be used to visualize information. Submissions are solicited in all areas of information visualization and human-centered information interfaces, including, but not limited to, such topics as:

- Interactive information visualization
- Multi-dimensional information visualization
- Information presentation
- Visualization of complex information
- Information visualization for heterogeneous audiences
- Visualizing the internet and WWW
- Browsing and other Navigation methods
- Visualization Algorithms
- Visualization of Algorithms
- Visualization of textual information
- Visualization and Knowledge Discovery
- Graph / Network Visualizations
- Geographic Visualizations

**Submissions:** The deadline for submission is March 31, 1999. Papers should be at most 8,000 words including an abstract, affiliation, and keywords, and should present previously unpublished original results. Please submit 8 copies of your paper. Video submissions (NTSC VHS) with papers are welcome (4 copies), but are not required. Videos will assist reviewers' assessment of the papers. Submit to:

**Graham Wills** • Lucent Technologies Bell Labs • Room 2F-323 • 263  
Shuman Blvd. • Naperville IL 60566 • USA • 630-979-7338

Fax: 630-713-4982 • [gwills@research.bell-labs.com](mailto:gwills@research.bell-labs.com)

URL: <http://www.infovis.org/infovis99/cfp.html>

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## InfoVis Late Breaking Hot Topics (due July 1, 1999)

Submissions will be accepted on Late Breaking "Hot Topics" that pertain to all areas of Information Visualization. These submissions must be original, may show work in progress, and may not exceed 2,500 words or a maximum of 4 pages including images. Images to accompany the paper are recommended. Accepted papers will be published and distributed at the conference.

Authors of accepted papers will have an opportunity to submit a revised paper. Submissions of printed papers (8 copies, due July 1, 1999) should be sent to **Nahum Gershon**, The MITRE Corporation, 1820 Dolly Madison Blvd., McLean, VA 22102, USA • 701-883-7518 • Fax: 703-883-3615 [gershon@mitre.org](mailto:gershon@mitre.org)

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