

Call For Papers

2014 IEEE VIS International Workshop on 3DVis:

Does 3D really make sense for Data Visualization?

Context

- The aim of this workshop is to discuss 3D display and 3D user interfaces for scientific and information visualization and Visual Analytics.
- As such, it is interesting to analyze the state of the art in 3D visualization and associated interaction. It is also the good place to review how 3D displays and user interfaces match human perceptual, cognitive and motor capabilities.
- Indeed, it is the heart of the 2D vs. 3D debate. On the one hand, 3D technologies provide additional options for display and interaction, which broadens the space of potential solutions considerably. Consequently, many 3D visualization approaches have been implemented. The recent introduction of low-cost virtual and augmented reality hardware further paves the way towards a deeper exploration of the design space for 3D visualization. Moreover, better consistency in terms of dimensions between the visualization and interaction may also improve the immersion and navigation in huge amounts of data.
- On the other hand, the experimental results from studies that investigate the differences between 2D and 3D visualization interfaces provide no real evidence for the claimed benefits of 3D technologies. Thus, the current body of literature provides at best inconclusive guidance on the benefits of 3D approaches. Moreover, a deep consideration of human abilities and capabilities identifies a potential mismatch with full 3D user interfaces. Yet, there may be a bias in the evaluations, as the prevalent visualization and interaction techniques in all areas of visualization are based on non-immersive technologies.
- In this workshop, we would like to present evidence for both sides of this debate, and also provide directions for future work.

Description

- This workshop is a satellite event of the IEEE VIS 2014 conference:
<https://sites.google.com/site/3dvisieeevis2014/>
- Although 3D interfaces may add additional possibilities for data representation as well as more natural interaction, current experimental results are inconclusive and the adoption of 3D methods by end users is rare.
- This 2D vs. 3D debate, far from having a final answer, is the focus of this workshop.
- New low-cost 3D systems make this technology accessible to everyone and also enable new modes of interaction. This has the potential to facilitate interaction with huge data sets.

Technical Scope

- Immersive visualization, navigation and interaction
- 3D for Scientific visualization, Information visualization, Visual analytics
- VR, AR and MR for 3D visualization
- Key factors and issues in 3D Data Visualization
- User evaluation of 2D vs 3D

Duration

- Half a day (between november 9th and november 14th 2014)

Submissions

- We solicit research papers, technotes, states of the art, position papers and demonstrations within the scope of 3D Visualization:
 - Research Papers (up to 8 pages) should describe original research results or original 3D Vis systems or frameworks
 - Technotes (up to 4 pages) should contain unpublished preliminary results of research, application, design or system work
 - State of the art reports (up to 8 pages) should provide surveys on one of the topics of this workshop
 - Position Papers (up to 6 pages) should present interesting and possibly controversial points of view on one of the topics of this workshop
 - Demonstrations (up to 2 pages associated to a video) should illustrate some limitations of the 2D or the 3D approach
- Submission dates:
 - Deadline for all categories of submissions: september 21th, 2014
 - Notification of acceptance: october 15th, 2014
 - Final version of the contributions: november 1st, 2014
- Submitted papers will be evaluated through a double blind reviewing process of the submissions by the PC committee members
- The workshop proceedings will consist of all accepted papers and will be submitted to the IEEE Digital Library
- Blind submissions should be made through the Easychair system:
<https://www.easychair.org/conferences/?conf=3dvisieevis2014>
- If you have any question about this workshop, you can send an email to:
 - thierry.duval@telecom-bretagne.eu

Website of the workshop:

- <https://sites.google.com/site/3dvisieevis2014/home>