

TAVA '11

Special Track on Theory and Applications of Visual Analytics

7 September 2011

Graz, Austria

<http://www.i-know.at/tava>

TAVA '11 addresses theoretical advances and practical applications of Visual Analytics. This is the sixth event in a series of special tracks on visualization topics organized in conjunction with the annual I- KNOW conference on Knowledge Management and Knowledge Technologies. Former events included the KIV (Knowledge and Information Visualisation) special tracks since I-KNOW '03 and the KVD (Knowledge Visualisation and Discovery) special tracks since I-KNOW '06. The focus of TAVA '11 on Visual Analytics reflects the increasing scientific importance and the growing practical relevance of this exciting new discipline.

This one-day special track is a programme item of I-KNOW '11, the 11th International Conference on Knowledge Management and Knowledge Technologies which takes place in Graz, Austria from September 7th to September 9nd 2011. The special track provides an interdisciplinary forum for international scientists and practitioners to discuss theoretical and practical aspects of Visual Analytics. I-KNOW 2011 brings together international researchers and practitioners from the fields of knowledge management and knowledge technologies. The conference will cover relevant aspects from the fields of Knowledge Management, Knowledge Discovery, Knowledge Services, Social Media, Enterprise 2.0 and the Social Web. I-KNOW 2011 will be held concurrently with I-SEMANTICS 2011, the International Conference on Semantic Systems.

Objectives

Visual Analytics is the science of analytical reasoning supported by interactive visual techniques. It integrates techniques from visualization and computer graphics, statistics and mathematics, data management and knowledge representation, data analysis and machine learning and cognitive and perceptual sciences. Real-world applications in areas like business intelligence, media analysis or protection of intellectual property rights require efficient access and analysis of massive, heterogeneous, dynamic knowledge repositories which frequently contain ambiguous or conflicting evidence. Visual Analytics advocates a promising combination of automatic analysis and human pattern recognition abilities and domain knowledge to address this challenge.

TAVA'11 addresses theoretical advances and practical applications of Visual Analytics. In the best tradition of the I-KNOW conference series, the objective of the special track is to bring together researchers and practitioners in the field. TAVA'11 will provide a forum for the promotion of research and developments in Visual Analytics with particular attention towards the application of Visual Analytics in Knowledge Technologies and Knowledge Management.

We encourage submission of original research papers reporting on theoretical advances, evaluation results or applications of Visual Analytics in relevant real-world scenarios. Submissions will be reviewed by a board of international experts with accepted papers to be published in the I-KNOW conference proceedings. The special track will be held in English.

Topics

Topics of interest include but are not limited to:

- Visual representations and interaction techniques
- Visualisation of search results, text and multimedia corpora
- Visualisation of knowledge structures
- Visualisation of temporal and spatial data
- Human computer interfaces for knowledge and information visualisation
- New display and interaction technologies, i.e. multitouch and stereoscopic 3D
- Analytical reasoning support, i.e. discourse and collaborative visualization
- Data management and knowledge representations
- Data analysis and machine learning
- Knowledge relationship discovery
- Cognitive and perceptual factors in Visual Analytics
- Empirical studies of Visual Analytics techniques
- Evaluation of Visual Analytics techniques
- Application reports, i.e. success stories or stories on spectacular failures

Target Group

The topics mentioned above are addressed at researchers and developers as well as at practitioners and providers in the fields of Visual Analytics.

Organisation

TAVA '11 will be inaugurated by a conference-wide keynote given by Prof. Daniel Keim (University of Konstanz, Germany). The special track program will be opened by a keynote given by Prof. Jack van Wijk (Eindhoven University of Technology, Netherlands). Three paper presentation sessions will be separated by comfortably scheduled breaks allowing for fruitful discussions among participants. A closing panel headed by Dr. Jörn Kohlhammer (Fraunhofer IGD, Germany) will investigate the future role of Visual Analytics in the context of Knowledge Technologies and conclude the special track.

Important Dates

30 April 2011: Submission of the full papers (6 to 8 pages)

31 May 2011: Notification of acceptance

30 June 2011: Camera ready version (6 to 8 pages)

7 Sept.-9 Sept. 2011: I-Know 2011 Conference

7 Sept 2011: TAVA 2011 Special Track

Submission Procedure

File Types: PDF, Word for Windows, Postscript (PS)

Style Guides: http://www.i-know.at/style_guide.html

Paper Submission System: <http://www.i-know.at/submission>

In case of problems or questions concerning the submission of papers, please contact the track chairs at tava@know-center.at.

Notification of Acceptance and Publishing

Authors of accepted papers will be notified by 31 May 2011. Accepted papers will be published within the I-KNOW '11 conference proceedings. At least one author of an accepted paper must register for I-KNOW '11 before the deadline for camera ready versions (30 June 2011) in order to get the paper published in the conference proceedings.

Chairs of TAVA '11

Michael Granitzer, Know-Center Graz (Austria)
Wolfgang Kienreich, Know-Center Graz (Austria)
Vedran Sabol, Know-Center Graz (Austria)

Programme Committee

Wolfgang Aigner, Technical University Vienna (Austria)
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I-Know '11 Keynote on Visual Analytics

Prof. Daniel Keim, University of Konstanz (Germany)

TAVA '11 Scientific Keynote

Prof. Jack van Wijk, Eindhoven University of Technology (Netherlands)

TAVA '11 Panel

Head of Panel: Dr. Jörn Kohlhammer, Fraunhofer IGD (Germany)
Panelists to be announced