

EuroVis 2017
Eurographics / IEEE VGTC Conference on Visualization 2017

Barcelona, Spain
June 12 – 16, 2017

Organized by



Visualització, Realitat Virtual i Interacció Gràfica



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH



EUROGRAPHICS
THE EUROPEAN ASSOCIATION
FOR COMPUTER GRAPHICS



IEEE Visualization and Graphics Technical Committee

Posters

Posters Co-Chairs

Anna Puig Puig, University of Barcelona, Spain
Tobias Isenberg, Inria, France

Published by
The Eurographics Association
ISBN 978-3-03868-044-4

Table of Contents

Posters

Structuring and Visualizing Knowledge in Soil Science	1
<i>Bastian Stöbel, Eva Rabot, Felix Richter, Ulrich Weller, and Hans-Jörg Vogel</i>	
Towards an Adaptive Framework for Real-Time Visualization of Streaming Big Data	5
<i>Amin M. Khan, Daniel Gonçalves, and Duarte C. Leão</i>	
Diggersdiaries: Using Text Analysis to Support Exploration and Reading in a Large Document Collection	9
<i>Jaume Nualart Vilaplana and M. Pérez-Montoro</i>	
Memory Efficient Parallel Ray-casting Algorithm for Unstructured Grid Volume Rendering	13
<i>Duksu Kim</i>	
Evaluating Cognitive Load: Force-directed Layout vs. Chord Layout	17
<i>Ricarda Moses, Shah Rukh Humayoun, Ragaad AlTarawneh, and Achim Ebert</i>	
Visualization of the Forever 27 Club	21
<i>Suchismita Naik</i>	
BitConduite: Visualizing and Analyzing Activity on the Bitcoin Network	25
<i>Christoph Kinkeldey, Jean-Daniel Fekete, and Petra Isenberg</i>	
Visualization Taxonomy based on the Specification of User's Goal and Data Dimensions	29
<i>Pawandep Kaur and Birgitta König-Ries</i>	
Hypenet: Visualizing Dynamic Hypergraphs	33
<i>Paola Valdivia, Paolo Buono, and Jean-Daniel Fekete</i>	
An Interactive Visual Representation to Explore Association with Hierarchical Social Circles	37
<i>Shah Rukh Humayoun, Syed Hammad Ali, Ragaad AlTarawneh, and Achim Ebert</i>	
Integrating Guided Clustering in Visual Analytics to Support Domain Expert Reasoning Processes	41
<i>Andreas Mathisen, Matthias Nielsen, and Kaj Grønbæk</i>	
DcPAIRS: A Pairs Plot Based Decision Support System	45
<i>Evanthia Dimara, Paola Valdivia, and Christoph Kinkeldey</i>	
Power Efficiency of Volume Raycasting on Mobile Devices	49
<i>Moritz Heinemann, Valentin Bruder, Steffen Frey, and Thomas Ertl</i>	
Interactive Lens for Effective Time-Series Animation	53
<i>Yang Chen, Jing Yang, and Ye Zhao</i>	
A Visual Approach for Text Analysis Using Multiword Topics	57
<i>Seongmin Mun, Guillaume Desagulier, and Kyungwon Lee</i>	
DaaG: Visual Analytics Clustering Using Network Representation	61
<i>Daniel Alcaide and Jan Aerts</i>	

Table of Contents

Interactive Visualization of Massive Location Data using Multi-Scale Trajectories	65
<i>Thomas De Bodt, Bart Adams, and Jan Aerts</i>	
Uncertainty Visualization of Stenotic Regions in Vascular Structures	69
<i>Gordan Ristovski, Horst K. Hahn, and Lars Linsen</i>	
Using Graphs for Exposing the Underlying Competence Design of Academic Degrees	73
<i>Laia Blasco-Soplon and Julià Mingüillón</i>	
'Them again?' Dynamic Communities in the Media	77
<i>Haolin Ren, Marie-Luce Viaud, and Guy Melançon</i>	
Visual Stratification for Epidemiological Analysis	81
<i>José Matute and Lars Linsen</i>	
MDS-based Visual Survey of Biological Data Visualization Techniques	85
<i>Andreas Kerren, Kostiantyn Kucher, Yuan-Fang Li, and Falk Schreiber</i>	
Visually Analyzing Parameter Influence on Optical Coherence Tomography Data in Ophthalmology	89
<i>Martin Röhlig, Martin Luboschik, Ruby Kala Prakasam, Oliver Stachs, and Heidrun Schumann</i>	
ConTraffic Visual Analytics in Support to Customs Risk-Analysis	93
<i>Mikaela Poulymenopoulou and Aris Tsois</i>	
Visual Analysis of Magnetic Resonance Spectroscopy Imaging Data for the Study of Human Brain Tumors ...	97
<i>Muhammad Jawad and Lars Linsen</i>	
Visual Analytics of Global Parameters in Simulation Ensembles of ODE-based Excitable Network Dynamics	101
<i>Quynh Quang Ngo, Marc-Thorsten Hütt, and Lars Linsen</i>	
Quantitative Comparison of Treemap Techniques for Time-Dependent Hierarchies	105
<i>Eduardo Faccin Vernier, Joao L. D. Comba, and Alex C. Telea</i>	
Projection Navigation In Extremely Large Datasets (PNIELD)	109
<i>J. F. Kruiger, Alex C. Telea, and Christophe Hurter</i>	
Responsive Data Visualisation	113
<i>Keith Andrews and Aleš Smrdel</i>	
Visualization of Temporal Logic Specifications	117
<i>James Scott-Brown and Antonis Papachristodoulou</i>	
Semi-automatic Colonic Content Analysis for Diagnostic	121
<i>Víctor Ceballos, Eva Monclús, Pere-Pau Vázquez, Álvaro Bendezú, Marianela Mego, Xavier Merino, Fernando Azpiroz, and Isabel Navazo</i>	

Table of Contents

Visual Analysis of Geolocated Echo Chambers in Social Media	125
<i>Michael Hundt, Bruno Schneider, Mennatallah El-Assady, Daniel A. Keim, and Alexandra Diehl</i>	
Tangible Visual Analysis: Brushing in a Mixed-Reality Environment	129
<i>Denis Gračanin, Reza Tasooji, Mohamed Handosa, Kresimir Matković, and Manuela Waldner</i>	
A High-Dimensional Data Quality Metric using Pareto Optimality	133
<i>Tobias Post, Thomas Wischgoll, Bernd Hamann, and Hans Hagen</i>	
Visualising Data with L2	137
<i>Graham McNeill</i>	

Preface

The posters track received 39 complete submissions this year. Each of these submissions received two independent reviews. Potential chair conflicts were handled by removing the conflicted co-chair completely from the review assignment and decision process for the respective submissions. Based on the reviews that the submissions received, we directly accepted 32 posters, we accepted 4 submissions conditionally, and rejected 3 submissions which were off-topic for the conference or did not discuss scientific research. From the 4 conditionally accepted submissions, 3 submitted a revision which was accepted by the chairs. The overall result is thus 35 accepted posters out of 39 submissions, resulting in an acceptance rate of 89.7%.

Anna Puig Puig and Tobias Isenberg

Author Index

Adams, Bart	65	König-Ries, Birgitta	29
Aerts, Jan	61, 65	Kruiger, J. F.	109
Alcaide, Daniel	61	Kucher, Kostiantyn	85
Ali, Syed Hammad	37	Leão, Duarte C.	5
AlTarawneh, Ragaad	17, 37	Lee, Kyungwon	57
Andrews, Keith	113	Li, Yuan-Fang	85
Azpiroz, Fernando	121	Linsen, Lars	69, 81, 97, 101
Bendezú, Álvaro	121	Luboschik, Martin	89
Blasco-Soplon, Laia	73	Mathisen, Andreas	41
Bodt, Thomas De	65	Matković, Kresimir	129
Bruder, Valentin	49	Matute, José	81
Buono, Paolo	33	McNeill, Graham	137
Ceballos, Víctor	121	Mego, Marianela	121
Chen, Yang	53	Melançon, Guy	77
Comba, Joao L. D.	105	Merino, Xavier	121
Desagulier, Guillaume	57	Minguillón, Julià	73
Diehl, Alexandra	125	Monclús, Eva	121
Dimara, Evanthis	45	Moses, Ricarda	17
Ebert, Achim	17, 37	Mun, Seongmin	57
El-Assady, Mennatallah	125	Naik, Suchismita	21
Ertl, Thomas	49	Navazo, Isabel	121
Fekete, Jean-Daniel	25, 33	Ngo, Quynh Quang	101
Frey, Steffen	49	Nielsen, Matthias	41
Gonçalves, Daniel	5	Papachristodoulou, Antonis	117
Gračanin, Denis	129	Pérez-Montoro, M.	9
Grønbæk, Kaj	41	Post, Tobias	133
Hagen, Hans	133	Poulymenopoulou, Mikaela	93
Hahn, Horst K.	69	Prakasam, Ruby Kala	89
Hamann, Bernd	133	Rabot, Eva	1
Handosa, Mohamed	129	Ren, Haolin	77
Heinemann, Moritz	49	Richter, Felix	1
Humayoun, Shah Rukh	17, 37	Ristovski, Gordan	69
Hundt, Michael	125	Röhlig, Martin	89
Hurter, Christophe	109	Schneider, Bruno	125
Hütt, Marc-Thorsten	101	Schreiber, Falk	85
Isenberg, Petra	25	Schumann, Heidrun	89
Jawad, Muhammad	97	Scott-Brown, James	117
Kaur, Pawandeep	29	Smrdel, Aleš	113
Keim, Daniel A.	125	Stachs, Oliver	89
Kerren, Andreas	85	Stößel, Bastian	1
Khan, Amin M.	5	Tasooji, Reza	129
Kim, Duksu	13	Telea, Alex C.	105, 109
Kinkeldey, Christoph	25, 45	Tsois, Aris	93

Author Index

Valdivia, Paola	33, 45	Waldner, Manuela	129
Vázquez, Pere-Pau	121	Weller, Ulrich	1
Vernier, Eduardo Faccin	105	Wischgoll, Thomas	133
Viaud, Marie-Luce	77	Yang, Jing	53
Vilaplana, Jaume Nualart	9	Zhao, Ye	53
Vogel, Hans-Jörg	1		