Table of Contents

Keynotes

Continuous Statistical Visualization
—Where Information Visualization Meets Scientific Visualization ........................................... 9
Daniel Weiskopf

Think big!
—Usability of large screen environments ................................................................. 11
Achim Ebert

Where do Visualization meet User-centred design?
—Exploring the tension between innovative design ideas and user preferences and innovation .................. 13
Jan Galliksen

Papers

Assisted Environment Map Probe Placement ................................................................. 17
M. G. Chajdas, A. Weis, and R. Westermann

Geometry Independent Surface Light Fields for Real Time Rendering of Precomputed Global Illumination ........ 27
E. Miandji, J. Kronander, and J. Unger

Accounting for Uncertainty in Medical Data: A CUDA Implementation of Normalized Convolution ................ 35
S. Lindholm and J. Kronander

Interactive Model Prototyping in Visualization Space ...................................................... 43
O. Daae Lampe and H. Hauser

Detecting Insight and Emotion in Visualization Applications with a Commercial EEG Headset ................. 53
Daniel Cernea, Andreas Kerren, and Achim Ebert

Towards an Integrated Web-based Visualization Tool:
A Comparative Survey of Visualization Techniques for Enhancing Stakeholders’ Participation in Planning .......... 61
Pouriya Parsanezhad, Ulf Ranhagen, and Yifang Ban

A versatile material reflectance measurement system for use in production ........................................ 69
Gabriel Eilertsen, Per Larsson, and Jonas Unger

Quantification of gaseous structures with volumetric reconstruction from visual hulls .................... 77
S. Seipel and P. Jenke

Considerations toward a Dynamic Mesh Data Structure .................................................. 83
S. Pena Serna, A. Stork, and D. W. Fellner

Short papers

Gestural 3D Interaction with a Beating Heart: Simulation, Visualization and Interaction .......................... 93

Multi-State Device Tracking for Tangible Tabletops ......................................................... 99
Ali Alavi, Brice Clocher, Allen Smith, Andreas Kunz, and Morten Fjeld

Visualization in ViSuCity, a tool for sustainable city planning ............................................. 105
Yifang Ban, Pontus Jakobsson, Lars Kjell Dahl, and Ulf Ranhagen

Posters

Augmented Reality-based Industrial Robot Control ........................................................ 113
B. Akan, A. Ameri E., and B. Çürüklü