

# IVAPP 2014

5<sup>th</sup> International Conference on Information  
Visualization Theory and Applications

Lisbon  
Portugal

5 - 8 January, 2014

VISIGRAPP

## PROCEEDINGS

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# IVAPP 2014

Proceedings of the  
5th International Conference on  
Information Visualization Theory and Applications

Lisbon, Portugal

5 - 8 January, 2014

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and Communication**

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# BRIEF CONTENTS

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INVITED SPEAKERS .....	IV
ORGANIZING AND STEERING COMMITTEES .....	V
PROGRAM COMMITTEE .....	VI
AUXILIARY REVIEWERS .....	VII
SELECTED PAPERS BOOK .....	VII
FOREWORD .....	IX
CONTENTS .....	XI

# INVITED SPEAKERS

---

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**Andreas Holzinger**

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**Gudrun Klinker**

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## SELECTED PAPERS BOOK

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A number of selected papers presented at IVAPP 2014 will be published by Springer-Verlag in a CCIS Series book. This selection will be done by the Conference Chair and Program Co-chairs, among the papers actually presented at the conference, based on a rigorous review by the VISIGRAPP 2014 Program Committee members.



# FOREWORD

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This book contains the proceedings of the International Conference on Information Visualization Theory and Applications (IVAPP 2014) which was organized and sponsored by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC) and technically co-sponsored by IEEE Computer Society and IEEE VGTC.

We hope that the IVAPP 2014 proceedings demonstrate new and innovative solutions, and highlights technical problems that are challenging and worthwhile. IVAPP was organized to promote a discussion forum between researchers, developers, manufactures, and end-users about the conference's research topics and to establish guidelines in the developing of more advanced visualization solutions.

We received a number of paper submissions for this edition of IVAPP, 54 in total, with contributions from all five continents, which attest to the success and global dimension of IVAPP. 11 papers were selected for publication as full papers; 13 papers were accepted for short presentations, and 15 submissions were accepted for poster presentations. The result was an oral-paper acceptance ratio of 44% and a high-quality program that is attractive to many experts in Information Visualization and related areas.

We hope that these conference proceedings, also submitted for indexation by Thomson Reuters Conference Proceedings Citation Index, INSPEC, DBLP, and EI, may help the Computer Graphics community to discover new interesting research challenges. Furthermore, a small set of presented works will be selected for the publication of extended versions in a forthcoming book of VISIGRAPP Selected Papers to be published by Springer during 2014.

Moreover, we are proud to inform that the program also includes four plenary keynote lectures, given by internationally distinguished researchers, namely Stephan Diehl (University of Trier, Germany), Miroslaw Z. Bober (University of Surrey, United Kingdom), Andreas Holzinger (Medical University Graz, Austria), and Gudrun Klinker (TU München, Germany). They contribute to increase the overall quality of the conference and to provide a deeper understanding of the conference fields of interest.

In order to promote the development of professional networks, the organizing committee has also prepared a conference dinner in the evening of January 7th. We hope that you enjoy this exciting conference, the social event, and that you have an unforgettable stay in the beautiful city of Lisbon, Portugal. We also look forward to meet you again at the next edition of IVAPP, details of which will be shortly available at <http://www.ivapp.visigrapp.org>.

Finally, we would like to express our thanks, first of all, to the authors of the technical papers, whose work and dedication made it possible to put together a program that is very exciting and of high technical quality. Next, we would like to thank all the members of the program committee and auxiliary reviewers who helped us with their expertise and time. We would also like to thank the invited speakers for their invaluable contribution and for

sharing their vision in their talks. Special thanks should be addressed to the INSTICC Steering Committee whose invaluable work made possible this event.

**José Braz**

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# CONTENTS

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## INVITED SPEAKERS

### KEYNOTE SPEAKERS

- Past, Present, and Future in and of Software Visualization IS-5  
*Stephan Diehl*
- Visual Content Fingerprinting and Search - An MPEG Perspective IS-7  
*Mirosław Z. Bober*
- On Interaction in Data Mining IS-9  
*Andreas Holzinger*
- Ubiquitous, Dynamic Inclusion and Fusion of Tracking Data from Various Sources for Mobile AR Applications in "AR-ready Environments" IS-11  
*Gudrun Klinker*

## ABSTRACT DATA VISUALIZATION

### FULL PAPERS

- Software Feathers - Figurative Visualization of Software Metrics 5  
*Fabian Beck*
- Generalized Pythagoras Trees for Visualizing Hierarchies 17  
*Fabian Beck, Michael Burch, Tanja Munz, Lorenzo Di Silvestro and Daniel Weiskopf*
- An Inverse Distance-based Potential Field Function for Overlapping Point Set Visualization 29  
*Jevgenijs Vihrovs, Krišjānis Prūsis, Kārlis Freivalds, Pēteris Ručevskis and Valdis Krebs*
- Template-based Treemaps to Preserve Spatial Constraints 39  
*Natallia Kokash, Bernard de Bono and Joost Kok*
- Visualization of Varying Hierarchies by Stable Layout of Voronoi Treemaps 50  
*Sebastian Hahn, Jonas Trümper, Dominik Moritz and Jürgen Döllner*
- Visualizations for Text Re-use 59  
*Stefan Jänicke, Annette Geßner, Marco Büchler and Gerek Scheuermann*
- Visualization of Remote Sensing Imagery by Sequential Dimensionality Reduction on Graphics Processing Unit 71  
*Safa A. Najim and Ik Soo Lim*
- Data Visualization using Decision Trees and Clustering 80  
*Olivier Parisot, Yoanne Didry, Pierrick Bruneau and Benoît Otjacques*

### SHORT PAPERS

- Visualizing Hierarchy Changes by Dynamic Indented Plots 91  
*Michael Burch, Tanja Blascheck, Christine Louka and Daniel Weiskopf*
- Visual Analysis of Time-Dependent Multivariate Data from Dairy Farming Industry 99  
*Lorenzo Di Silvestro, Michael Burch, Margherita Caccamo, Daniel Weiskopf, Fabian Beck and Giovanni Gallo*

Analyzing Intrinsic Motion Textures Created from Naturalistic Video Captures <i>Angus Graeme Forbes, Christopher Jette and Andrew Predoehl</i>	107
Storyboard Augmentation of Process Model Grammars for Stakeholder Communication <i>Nardella Kathleen, Brown Ross and Simone Kriglstein</i>	114
Multi-level Visualisation using Gaussian Process Latent Variable Models <i>Shahzad Mumtaz, Darren R. Flower and Ian T. Nabney</i>	122
A Computational Metric of the Quality of Circulation in Interior Spaces <i>Arash Bahrehmand, Alun Evans and Josep Blat</i>	130
Visualising Java Coupling and Fault Proneness <i>P. Rosner, M. Child and S. Counsell</i>	138
Reconstructing Conimbriga - Digital Cantaber <i>César Ferreira, Nuno Rodrigues, Alexandrino Gonçalves and Virgílio Hipólito-Correia</i>	145
A Fraud Detection Visualization System Utilizing Radial Drawings and Heat-maps <i>Evmorfia N. Argyriou, Antonios Symvonis and Vassilis Vassiliou</i>	153
A Geological Metaphor for Geospatial-temporal Data Analysis <i>Tom Liebmann, Patrick Oesterling, Stefan Jänicke and Gerik Scheuermann</i>	161
Force Directed Flow Map Layout <i>Alberto Debiasi, Bruno Simões and Raffaele De Amicis</i>	170
Context-Specific Sentiment Lexicon Expansion via Minimal User Interaction <i>Raheleh Makki, Stephen Brooks and Evangelos E. Milios</i>	178
Visualization and Clustering of Online Book Reviews <i>Shiaofen Fang, Lanfang Miao and Eric Lin</i>	187
Visual Exploration of Relationships between Document Clusters <i>Ilir Jusufi, Andreas Kerren, Jiayi Liu and Björn Zimmer</i>	195
A Structured Approach for Conducting a Series of Controlled Experiments in Software Visualization <i>Richard Müller, Pascal Kovacs, Jan Schilbach, Ulrich W. Eisenecker, Dirk Zeckzer and Gerik Scheuermann</i>	204
Level Set Trees with Enhanced Marginal Density Visualization <i>Kyösti Karttunen, Lasse Holmström and Jussi Klemelä</i>	210
A Sketch of a Theory of Visualization <i>Randy Goebel</i>	218
A Perceptive Insight into Cities Patterns by Visualizing Urban Economies <i>Luca Piovano, Alberto Andréu, Iris Galloso and Claudio Feijóo</i>	222

## **GENERAL DATA VISUALIZATION**

### **FULL PAPERS**

Eye-tracking Investigation During Visual Analysis of Projected Multidimensional Data with 2D Scatterplots <i>Ronak Etemadpour, Bettina Olk and Lars Linsen</i>	233
---	-----

VizClick - Visualizing Clickstream Data <i>Rajat Kateja, Amerineni Rohith, Piyush Kumar and Ritwik Sinha</i>	247
---	-----

## SHORT PAPERS

IPFViewer - A Visual Analysis System for Hierarchical Ensemble Data <i>Matthias Thurau, Christoph Buck and Wolfram Luther</i>	259
Suggesting Visualisations for Published Data <i>Belgin Mutlu, Patrick Hoefler, Gerwald Tschinkel, Eduardo Veas, Vedran Sabol, Florian Stegmaier and Michael Granitzer</i>	267
Role of Human Perception in Cluster-based Visual Analysis of Multidimensional Data Projections <i>Ronak Etemadpour, Robson Carlos da Motta, Jose Gustavo de Souza Paiva, Rosane Minghim, Maria Cristina Ferreira de Oliveira and Lars Linsen</i>	276
Visual Analysis of Perceptual and Cognitive Processes <i>Michael Raschke, Tanja Blascheck, Marianne Richter, Tanja Agapkin and Thomas Ertl</i>	284
GCLViz: Garbage Collection vs. Latency Visualization <i>Chihua Ma, Stanislav Liberman and Haifeng Zheng</i>	292

## SPATIAL DATA VISUALIZATION

### FULL PAPER

Fine-Grained Provenance of Users' Interpretations in a Collaborative Visualization Architecture <i>Aqeel Al-Naser, Masroor Rasheed, Duncan Irving and John Brooke</i>	305
--	-----

### SHORT PAPERS

Uncertainty Estimation and Visualization of Wind in Weather Forecasts <i>Bård Fjukstad, John Markus Bjørndalen and Otto Anshus</i>	321
Visual Analytics of Multi-sensor Weather Information - Georeferenciation of Doppler Weather Radar and Weather Stations <i>Aitor Moreno, Andoni Galdós, Andoni Mujika and Álvaro Segura</i>	329
Visualizing Large Scale Vehicle Traffic Network Data - A Survey of the State-of-the-art <i>H. W. A. S. Gondim, H. A. D. do Nascimento and D. Reilly</i>	337
Interactive Stream Surface Placement - A Hybrid Clustering Approach Supported by Tree Maps <i>M. Edmunds, R. S. Laramée, R. Malki, I. Masters, Y. Wang, G. Chen, E. Zhang and N. Max</i>	347
Hardware-Accelerated Attribute Mapping for Interactive Visualization of Complex 3D Trajectories <i>Stefan Buschmann, Matthias Trapp, Patrick Lühne and Jürgen Döllner</i>	356

AUTHOR INDEX	365
--------------	-----