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Visual Information Systems

Web-Based Visual Information Search and Management

10th International Conference, VISUAL 2008
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Proceedings

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Preface

The international conference series on Visual Information Systems (VISUAL) originates from the idea that the exchange of views, results and experiences would allow researchers and practitioners working in the area of visual information systems to address common problems more effectively. Following the success of previous editions held in Melbourne (1996), San Diego (1997), Amsterdam (1999), Lyon (2000), Taiwan (2002), Miami (2003), San Francisco (2004), Amsterdam (2005), and Shanghai (2007), the aim of the 2008 edition of the International Conference on Visual Information Systems was to provide a fruitful forum of discussion in research fields related to computer vision, databases, human computer interaction, image processing, information visualization, and knowledge and information management. The University of Salerno was honored to celebrate the 10th edition of VISUAL, choosing a prestigious hotel situated on the enchanting Gulf of Salerno, located between the beautiful Coast of Amalfi and the Cilento National Park (both part of UNESCO patrimony). VISUAL 2008 received 58 submissions, which were reviewed by more than 38 international experts in the related research fields from 19 different countries. The resulting technical program continued the tradition of mixing carefully-reviewed research contributions, experience reports and other activities with plenary presentations. Papers collected in this volume include, but are not limited to, topics on data visualization, geovisualization, image and video databases, mobile visual information systems, visual data mining, machine learning and pattern recognition techniques for visual information management, and applications of visual information systems. In particular, three keynote talks were delivered at VISUAL 2008 and six thematic sessions were organized. The first invited talk, A Visual Analytics Approach to Exploration of Large Amounts of Movement Data, was given by Prof. Gennady Andrienko in cooperation with Natalia Andrienko, from the Fraunhofer Institute Intelligent Analysis and Information Systems. Prof. Andrienko faced the issue of enhancing human interpretation of movement data and described the results of their research experience about adequate analysis methods. The second talk was given by Prof. Franz Leberl from Graz University of Technology. The aim of his presentation, Locational Awareness on the Internet, was "to evangelize the current capabilities of the Virtual Earth system, point to some pieces of new science in the analysis of imagery of the human habitat, and of Visual Computing, and set the stage for an educated speculation about the future of computing." Finally, Prof. Shi Kuo Chang, from the University of Pittsburgh, concluded the Keynote Sessions by giving a talk on Virtual Spaces: From the Past to the Future, where he first described how a computer scientist with research interests in visual languages may benefit from the theory and practice of architecture, and then introduced the concept of the sentient map, aimed to make an interactive map even more powerful. During the thematic sessions, the authors delivered

their contributions and the participants were incited to carry out constructive discussions on research results of great current interest. The first five sessions were concerned with Information and Data Visualization, Advanced Techniques for Visual Information Management, Mobile Visual Information Systems, Image and Video Indexing and Retrieval, and Applications of Visual Information Systems, respectively. The last session was then devoted to some interesting industrial experiences. Finally, let us express our gratitude to the many people who supported the realization of this event with their time and energy. First of all, we would like to thank all the authors for submitting relevant contributions for the publication of this volume. We also gratefully acknowledge the work of the Program Committee Members, as well as that of the external referees, who offered their expertise in the review process. Thanks are due to the University of Salerno, the UniCredit Banca di Roma and the Dipartimento di Matematica e Informatica for their contribution to the success of the conference, as well as to the Unlimited Software, the Engineering and the Pixsta companies for their support. Finally, we would like to mention the work done by Rita Francese, in interacting with our industrial partners; Luca Paolino, in corresponding with the authors; Vincenzo Del Fatto in supporting the scientific organization, and Davide De Chiara, in designing and maintaining the conference website.

September 2008

Guoping Qiu
Genoveffa Tortora
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