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Graph-Based Representations in Pattern Recognition

Springer

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Preface

It was an honor and a pleasure to organize the 8th IAPR-TC-15 Workshop on Graph-Based Representations in Pattern Recognition (GbR 2011) in Münster, Germany. GbR has been held biennially for 14 years: Lyon, France (1997); Haindorf, Austria (1999); Ischia, Italy (2001); York, UK (2003); Poitiers, France (2005); Alicante, Spain (2007); and Venice, Italy (2009).

The Technical Committee TC15 Graph-Based Representations (`http://www.greyc.ensicaen.fr/iapr-tc15/`) of the International Association for Pattern Recognition (IAPR) was founded in 1996 to encourage research work at the intersection between pattern recognition and graph theory. Since then TC15 has been very active in organizing the biennial GbR workshops, sponsoring related special sessions at conferences, and promoting special issues in journals.

All the papers presented in these proceedings were reviewed by two, and in most cases, three reviewers. They cover a wide range of topics related to graphs, ranging from novel theoretic and algorithmic development to graph-based applications. It is our goal to encourage the use of graph-theoretic concepts and algorithms for solving real problems. The challenges derived from the practice also pose new fundamental graph-theoretic problems to be tackled. It is this interaction of theory and applications which makes GbR a unique forum for presenting and discussing the most recent progress in graph-based representations from a pattern recognition perspective at a high-quality level. Our efforts in reflecting both the theoretic and application aspects in the workshop program were further substantiated by two invited talks: "Partial Difference Equations (PdE) on Graphs for Image and Data Processing" (Olivier Lezoray) and "Graph Algorithmic Techniques for Biomedical Image Segmentation" (Milan Sonka).

The success of GbR 2011 would not have been possible without the support of many institutions and people. First of all, we would like to thank all authors of the submitted papers and the invited speakers for their contributions. All Program Committee members and additional reviewers listed here deserve great thanks for their timely and competent reviews. We are grateful to our sponsors for their support as well. Also, the cooperation with Münster City Marketing was very pleasant and helpful. Many thanks go to the members of the Local Organizing Committee. Finally, we would like to thank Springer for giving us the opportunity to continue publishing the GbR proceedings in the LNCS series.

Founded in 793, Münster belongs to the historical cities of Germany. It is most famous as the site of signing of the Treaty of Westphalia ending the Thirty Years' War in 1648. Today, it is acknowledged as a city of science and learning (and the capital city of bicycles, Germany's Climate Protection Capital, and more).

It was our great pleasure to offer the participants the platform in this multi-faceted city for a lively scientific exchange and many other relaxed hours. Finally, to the readers of this proceedings book: Enjoy it!

May 2011   Xiaoyi Jiang
                                                                          Miquel Ferrer
                                                                       Andrea Torsello

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