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Graph-Based Representations in Pattern Recognition

7th IAPR-TC-15 International Workshop, GbRPR 2009
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Proceedings

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Preface

This volume contains the papers presented at the 7th IAPR-TC-15 Workshop on Graph-Based Representations in Pattern Recognition – GbR 2009. The workshop was held in Venice, Italy between May 26–28, 2009. The previous workshops in the series were held in Lyon, France (1997), Haindorf, Austria (1999), Ischia, Italy (2001), York, UK (2003), Poitiers, France (2005), and Alicante, Spain (2007).

The Technical Committee (TC15, http://www.greyc.ensicaen.fr/iapr-tc15/) of the IAPR (International Association for Pattern Recognition) was founded in order to federate and to encourage research work at the intersection of pattern recognition and graph theory. Among its activities, the TC15 encourages the organization of special graph sessions in many computer vision conferences and organizes the biennial GbR Workshop.

The scientific focus of these workshops covers research in pattern recognition and image analysis within the graph theory framework. This workshop series traditionally provide a forum for presenting and discussing research results and applications in the intersection of pattern recognition, image analysis and graph theory.

The papers in the workshop cover the use of graphs at all levels of representation, from low-level image segmentation to high-level human behavior. There are papers on formalizing the use of graphs for representing and recognizing data ranging from visual shape to music, papers focusing on the development of new and efficient approaches to matching graphs, on the use of graphs for supervised and unsupervised classification, on learning the structure of sets of graphs, and on the use of graph pyramids and combinatorial maps to provide suitable coarse-to-fine representations. Encouragingly, the workshop saw the convergence of ideas from several fields, from spectral graph theory, to machine learning, to graphics.

The papers presented in the proceedings have been reviewed by at least two members of the Program Committee and each paper received on average of three reviews, with more critical papers receiving as many as five reviews. We sincerely thank all the members of the Program Committee and all the additional referees for their effort and invaluable help. We received 47 papers from 18 countries and 5 continents. The Program Committee selected 18 of them for oral presentation and 19 as posters. The resulting 37 papers revised by the authors are published in this volume.

March 2009

Andrea Torsello
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