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Graph-Based Representations in Pattern Recognition

12th IAPR-TC-15 International Workshop, GbRPR 2019
Tours, France, June 19–21, 2019
Proceedings

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Preface

This volume contains the papers presented at the 12th IAPR-TC15 Workshop on Graph-Based Representations in Pattern Recognition (GbR) held during June 19–21, 2019, in Tours.

In total 22 papers were accepted and presented orally. Each submission was reviewed by at least two and usually three Program Committee members. The program also included two very interesting invited talks: one by Christine Solnon, from the INSA of Lyon, who presented a talk entitled “Experimental Evaluation of Subgraph Isomorphism Solvers”; one by Marco Gori, from the University of Siena, who presented a talk entitled “Local Propagation in Graphical Neural Networks.”

Accepted papers mainly cover the following topics: graph edit distance, graph matching, machine learning for graph problems, network and graph embedding, spectral graph problems, and parallel algorithms for graph problems. Numerous applications have been addressed with the help of graph-based representations, ranging from fMRI applications, image and video processing, to social networks analysis, document analysis, chemio-informatics and classification problems.

Authors of selected papers were invited to submit an extended version to a Special Issue on “Advances in Graph-based Representations for Pattern Recognition” to be published in *Pattern Recognition Letters* in 2020.

The GbR 2019 workshop was hosted by the Computer Science Laboratory of University of Tours in France (LIFAT). We acknowledge the generous support from the city of Tours, the French Region Centre Val de Loire, the University of Tours and the Engineering School of the University, the research federation ICVL, and the company APSIDE. We would like to thank all the Program Committee members for their help in the review process. We also wish to thank all the local organizers. Without their contributions, GbR 2019 would not have been successful. Finally, we express our appreciation to Springer for publishing this volume.

June 2019

Donatello Conte
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Contents

Experimental Evaluation of Subgraph Isomorphism Solvers	1
<i>Christine Solnon</i>	
GEDLIB: A C++ Library for Graph Edit Distance Computation	14
<i>David B. Blumenthal, Sébastien Bougleux, Johann Gamper, and Luc Brun</i>	
Learning the Graph Edit Costs: What Do We Want to Optimise?	25
<i>Elena Rica, Susana Álvarez, and Francesc Serratos</i>	
Sub-optimal Graph Matching by Node-to-Node Assignment Classification . . .	35
<i>Xavier Cortés, Donatello Conte, and Francesc Serratos</i>	
Cross-Evaluation of Graph-Based Keyword Spotting in Handwritten Historical Documents.	45
<i>Michael Stauffer, Paul Maergner, Andreas Fischer, and Kaspar Riesen</i>	
Graph Edge Entropy in Maxwell-Boltzmann Statistics for Alzheimer's Disease Analysis.	56
<i>Jianjia Wang, Richard C. Wilson, and Edwin R. Hancock</i>	
Solving the Graph Edit Distance Problem with Variable Partitioning Local Search	67
<i>Mostafa Darwiche, Donatello Conte, Romain Raveaux, and Vincent T'kindt</i>	
A Database and Evaluation for Classification of RNA Molecules Using Graph Methods	78
<i>Enes Algul and Richard C. Wilson</i>	
Event Prediction Based on Unsupervised Graph-Based Rank-Fusion Models	88
<i>Icaro Cavalcante Dourado, Salvatore Tabbone, and Ricardo da Silva Torres</i>	
Generalized Median Graph via Iterative Alternate Minimizations.	99
<i>Nicolas Boria, Sébastien Bougleux, Benoit Gaüzère, and Luc Brun</i>	
An Hypergraph Data Model for Expert Finding in Multimedia Social Networks	110
<i>Vincenzo Moscato, Antonio Picariello, and Giancarlo Sperli</i>	

On-Line Learning the Edit Costs Based on an Embedded Model. 121
Elena Rica, Susana Álvarez, and Francesc Serratos

Congratulations! Dual Graphs Are Now Orientated! 131
Darshan Batavia, Walter G. Kropatsch, Rocio M. Casablanca, and Rocio Gonzalez-Diaz

A Parallel Algorithm for Subgraph Isomorphism. 141
Vincenzo Carletti, Pasquale Foggia, Pierluigi Ritrovato, Mario Vento, and Vincenzo Vigilante

Local Binary Pattern Based Graph Construction for Hyperspectral Image Segmentation 152
Kaouther Tabia, Xavier Desquesnes, Yves Lucas, and Sylvie Treuillet

A Parallel MCMC Algorithm for the Balanced Graph Coloring Problem 161
Donatello Conte, Giuliano Grossi, Raffaella Lanzaarotti, Jianyi Lin, and Alessandro Petrini

An Attributed Graph Embedding Method Using the Tree-Index Algorithm. . . 172
Yuhang Jiao, Yueting Yang, Lixin Cui, and Lu Bai

A Graph-Theoretic Framework for Summarizing First-Person Videos 183
Abhimanyu Sahu and Ananda S. Chowdhury

Network Time Series Analysis Using Transfer Entropy 194
Ibrahim Caglar and Edwin R. Hancock

Reconstructing Objects from Noisy Images at Low Resolution 204
Helene Svane and Aasa Feragen

Network Embedding by Walking on the Line Graph 215
Miguel Angel Lozano, Manuel Curado, Francisco Escolano, and Edwin R. Hancock

Discriminant Manifold Learning with Graph Convolution Based Regression for Image Classification 226
Ruifeng Zhu, Fadi Dornaika, and Yassine Ruichek

Graph-Based Representations for Supporting Genome Data Analysis and Visualization: Opportunities and Challenges 237
Vincenzo Carletti, Pasquale Foggia, Erik Garrison, Luca Greco, Pierluigi Ritrovato, and Mario Vento

Author Index 247