Record Nr. UNISA996200028203316 **Titolo** Graph-Based Representations in Pattern Recognition [[electronic resource] ]: 10th IAPR-TC-15 International Workshop, GbRPR 2015. Beijing, China, May 13-15, 2015. Proceedings / / edited by Cheng-Lin Liu, Bin Luo, Walter G. Kropatsch, Jian Cheng Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-18224-2 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (XII, 376 p. 110 illus.) Image Processing, Computer Vision, Pattern Recognition, and Graphics; Collana ; 9069 006.4 Disciplina Pattern recognition Soggetti Optical data processing Computer graphics Computer science—Mathematics Data structures (Computer science) Algorithms Pattern Recognition Image Processing and Computer Vision Computer Graphics Discrete Mathematics in Computer Science Data Structures Algorithm Analysis and Problem Complexity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Graph-based Representation -- Approximation of Graph Edit Distance in Quadratic Time -- Data Graph Formulation as the Minimum-Weight Maximum-Entropy Problem -- An Entropic Edge Assortativity Measure -- A Subpath Kernel for Learning Hierarchical Image Representations --Coupled-Feature Hypergraph Representation for Feature Selection --Reeb Graphs Through Local Binary Patterns -- Incremental embedding within a dissimilarity-based framework -- Graph Matching -- A First

Step Towards Exact Graph Edit Distance Using Bipartite Graph Matching

-- Consensus of Two Graph Correspondences through a Generalisation of the Bipartite Graph Matching Algorithm -- Revisiting Volegnant-Jonker for Approximating Graph Edit Distance -- A Hypergraph Matching Framework for Refining Multi-source Feature Correspondences -- Kite Recognition by means of Graph Matching --GEM++: a tool for solving substitution-tolerant subgraph isomorphism -- A Graph Database Repository and Performance Evaluation Metrics for Graph Edit Distance -- Improving Hausdorff Edit Distance Using Structural Node Context -- Learning Graph Model for Different Dimensions Image Matching -- VF2 Plus: An Improved Version of VF2 For Biological Graphs -- Report on the First Contest on Graph Matching Algorithms for Pattern Search in Biological Databases -- Approximate Graph Edit Distance Computation Combining Bipartite Matching and Exact Neighborhood Substructure Distance -- Multi-layer Tree Matching Using HSTs -- Large-scale Graph Indexing using Binary Embeddings of Node Contexts -- Attributed Relational Graph Matching with Sparse Relaxation and Bistochastic Normalization -- Graph Clustering and Classification.-On the Influence of Node Centralities on Graph Edit Distance for Graph Classification -- A Mixed Weisfeiler-Lehman Graph Kernel -- A Quantum Jensen-Shannon Graph Kernel using Discrete-time Quantum Walks -- Density Based Cluster Extension and Dominant Sets Clustering -- Salient Object Segmentation from Stereoscopic Images -- Causal Video Segmentation using Superseeds and Graph Matching -- Fast Minimum Spanning Tree based Clustering Algorithms on Local Neighborhood Graph -- Graph-based Application -- From bags to graphs of stereo subgraphs in order to predict molecule's properties -- Thermodynamics of Time Evolving Networks -- Isometric Mapping Hashing -- Skeletal Graphs from Schrodinger Magnitude and Phase -- Graph Based Lymphatic Vessel Wall Localisation and Tracking -- A Comic Retrieval System Based on Multilayer Graph Representation and Graph Mining -- Learning High-Order Structures for Texture Retrieval.

## Sommario/riassunto

This book constitutes the refereed proceedings of the 10th IAPR-TC-15 International Workshop on Graph-Based Representations in Pattern Recognition, GbRPR 2015, held in Beijing, China, in May 2015. The 36 papers presented in this volume were carefully reviewed and selected from 53 submissions. The accepted papers cover diverse issues of graph-based methods and applications, with 7 in graph representation, 15 in graph matching, 7 in graph clustering and classification, and 7 in graph-based applications.