1. Record Nr. UNINA9910299725003321 Local Binary Patterns: New Variants and Applications / / edited by **Titolo** Sheryl Brahnam, Lakhmi C. Jain, Loris Nanni, Alessandra Lumini Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2014 **ISBN** 3-642-39289-X Edizione [1st ed. 2014.] 1 online resource (X, 271 p. 93 illus., 5 illus. in color.) Descrizione fisica Collana Studies in Computational Intelligence, , 1860-949X;; 506 Disciplina 006.3 Soggetti Computational intelligence Artificial intelligence Optical data processing Computational Intelligence Artificial Intelligence Image Processing and Computer Vision Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references. Nota di bibliografia Nota di contenuto Introduction to LBP: New Variants and New Applications by Sheryl Brahnam, Lakhmi C. Jain, Alessandra Lumini, Loris Nanni -- A Unifying Framework for LBP and Related Methods, Francesco Bianconi and Antonio Fernández -- Local Phase Quantization for Blur Insensitive Texture Description, Janne Heikkilä, Esa Rahtu, and Ville Ojansivu --The Geometric Local Textural Patterns (GLTP) Technique, S. A. Orjuela Vargas, J. P. Yañez Puentes, and W. Philips -- Local Configuration Features and Discriminative Learnt Features for Texture Description. Yimo Guo, Guoying Zhao, and Matti Pietikäinen -- Heterogeneous Ensemble of Classifiers for Sub-Cellular Image Classification Based on Local Ternary Patterns, Loris Nanni, Michelangeo Paci, and Stefano Severi -- Fuzzy Local Binary Patterns, Stamos Katsigiannis, Eystratios Keramidas, Dimitris Maroulis -- Ensemble of Local Phase Quantization Variants with Ternary Encoding, Loris Nanni, Sheryl Brahnam, Alessandra Lumini, and Tonya Barrier -- State-of-the-Art LBP Descriptor for Face Recognition, Cho Ho Chan, Josef Kittler, and

Norman Poh -- Thermal Face Recognition in Unconstrained

Environments Using Histograms of LBP Features, Javier Ruiz-del-Solar, Rodrigo Verschae, Gabriel Hermosilla, and Mauricio Correa -- Histogram-Tensorial Gaussian Representations and its Applications to Facial Analysis, John A. Ruiz Hernandez, James L. Crowley, Augustin Lux, and Matti Pietikäinen.

Sommario/riassunto

This book introduces Local Binary Patterns (LBP), arguably one of the most powerful texture descriptors, and LBP variants. This volume provides the latest reviews of the literature and a presentation of some of the best LBP variants by researchers at the forefront of textual analysis research and research on LBP descriptors and variants. The value of LBP variants is illustrated with reported experiments using many databases representing a diversity of computer vision applications in medicine, biometrics, and other areas. There is also a chapter that provides an excellent theoretical foundation for texture analysis and LBP in particular. A special section focuses on LBP and LBP variants in the area of face recognition, including thermal face recognition. This book will be of value to anyone already in the field as well as to those interested in learning more about this powerful family of texture descriptors.