1. Record Nr. UNINA9910483829503321 Recent Advances in Computer Vision: Theories and Applications // Titolo edited by Mahmoud Hassaballah, Khalid M. Hosny Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-03000-8 Edizione [1st ed. 2019.] 1 online resource (XV, 425 p. 158 illus., 106 illus. in color.) Descrizione fisica Collana Studies in Computational Intelligence, , 1860-949X;; 804 006.3 Disciplina 006.37 Soggetti Computational intelligence Optical data processing Artificial intelligence Computational Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Computer Vision for Supporting Fashion Creative Processes -- Facial Features Detection and Localization -- Advances and Trends in Video Face Alignment -- Video Similarity Measurement and Search --Analysis and Evaluation of Keypoint Descriptors for Image Matching --Feature Extraction of Color images using Quaternion Moments -- Face recognition Using Exact Gaussian-Hermit Moments and Nonnegative Matrix Factorization -- Face Recognition with Discrete Orthogonal Moments -- Content-Based Image Retrieval using Multiresolution Feature Descriptors -- Landmark Recognition: From Small-Scale to Large-Scale Retrieval -- Ocean Ecosystems Plankton Classification --Boundary Detection of Echocardiographic Images during Mitral Regurgitation -- Motion Estimation Made Easy: Evolution and Trends in Visual Odometry -- Deep Ear Recognition Pipeline -- Scene Classification Using Transfer Learning -- Hyperspectral Image: Fundamentals and Advances.

This book presents a collection of high-quality research by leading

Sommario/riassunto

experts in computer vision and its applications. Each of the 16 chapters can be read independently and discusses the principles of a specific topic, reviews up-to-date techniques, presents outcomes, and highlights the challenges and future directions. As such the book explores the latest trends in fashion creative processes, facial features detection, visual odometry, transfer learning, face recognition, feature description, plankton and scene classification, video face alignment, video searching, and object segmentation. It is intended for postgraduate students, researchers, scholars and developers who are interested in computer vision and connected research disciplines, and is also suitable for senior undergraduate students who are taking advanced courses in related topics. However, it is also provides a valuable reference resource for practitioners from industry who want to keep abreast of recent developments in this dynamic, exciting and profitable research field.