1. Record Nr. UNINA9910299713003321

Titolo	Advances in low-level color image processing / / M. Emre Celebi, Bogdan Smolka, editors
Pubbl/distr/stampa	Dordrecht [Netherlands] : , : Springer, , 2014
ISBN	94-007-7584-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (x, 425 pages) : illustrations (some color)
Collana	Lecture Notes in Computational Vision and Biomechanics, , 2212-9391 ; ; 11
Disciplina	006.6
Soggetti	Image processing - Digital techniques Multispectral imaging Color Coding theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 2212-9391."
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Preface -- 1 Automated Color Misalignment Correction for Close-Range and Long-Range Hyper-Resolution Multi-Line CCD Images, by Zhiyu Chen, Andreas Koschan, Chung-Hao Chen, and Mongi Abidi -- 2 Adaptive Demosaicing Algorithm Using Characteristics of the Color Filter Array Pattern, by Ji Won Lee and Rae-Hong Park -- 3 A Taxonomy of Color Constancy and Invariance Algorithm, by Dohyoung Lee and Konstantinos N. Plataniotis -- 4 On the von Kries Model: Estimate, Dependence on Light and Device, and Applications, by Michela Lecca -- 5 Impulse and mixed multi-channel denoising using statistical halfspace depth functions, by Djordje Baljozovi, Aleksandra Baljozovi, Branko Kovaevi -- 6 Spatially Adaptive Color Image Processing, by Johan Debayle and Jean-Charles Pinoli -- 7 Vector ordering and multispectral morphological image processing, by Santiago Velasco-Forero and Jesus Angulo -- 8 Morphological Template Matching in Color Images, by Sébastien Lefèvre, Erhan Aptoula, Benjamin Perret, and Jonathan Weber -- 9 Tensor Voting for Robust Color Edge Detection, by Rodrigo Moreno, Miguel Angel Garcia, and Domenec Puig -- 10 Color Categorization Models for Color Image Segmentation, by Teresa Alarcon, Oscar Dalmau -- 11 Skin region detection and

segmentation in color images, by Michal Kawulok, Jakub Nalepa and Jolanta Kawulok -- 12 Contribution of skin color cue in face detection applications, by Dohyoung Lee, Jeaff Wang, and Konstantinos N. Plataniotis -- 13 Color Saliency Evaluation for Video Game Design, by Richard M. Jiang, Ahmed Bouridane, and Abbes Amira.

Sommario/riassunto

Color perception plays an important role in object recognition and scene understanding both for humans and intelligent vision systems. Recent advances in digital color imaging and computer hardware technology have led to an explosion in the use of color images in a variety of applications including medical imaging, content-based image retrieval, biometrics, watermarking, digital inpainting, remote sensing, visual quality inspection, among many others. As a result, automated processing and analysis of color images has become an active area of research, to which the large number of publications of the past two decades bears witness. The multivariate nature of color image data presents new challenges for researchers and practitioners as the numerous methods developed for single channel images are often not directly applicable to multichannel ones. The goal of this volume is to summarize the state-of-the-art in the early stages of the color image processing pipeline.