1. Record Nr. UNINA9910437918303321

Titolo	Color medical image analysis / / M. Emre Celebi, Gerald Schaefer, editors
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-283-63443-0 9786613946881 94-007-5389-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (207 p.)
Collana	Lecture notes in computational vision and biomechanics, , 2212-9391 ; ; v. 6
Altri autori (Persone)	CelebiM. Emre SchaeferGerald
Disciplina	621.36/7
Soggetti	Diagnostic imaging Imaging systems in medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Color Medical Image Analysis; Preface; Contents; A Data Driven Approach to Cervigram Image Analysis and Classification; 1 Introduction; 2 Related Work; 3 Methodology; 3.1 Visual Feature Extraction and Representation; Color Features; Texture Features; Image Similarity Measurement; 3.2 Finding the Region of Interest; 3.3 Cervigram Classification; 3.4 Support Vector Machine Classification; 3.5 Majority Vote Classification; 4 Results; 4.1 Isolating the Region of Interest; 4.2 Accuracy of Our Disease Classification; 4.3 Weighted Effect of Color and Texture; 5 Discussion and Conclusion; References Macroscopic Pigmented Skin Lesion Segmentation and Its Influence on Lesion Classification and Diagnosis1 Introduction; 2 Pre-processing; 2.1 Shading Attenuation; 3 Segmentation; 3.1 Grayscale-Based Methods; 3.1.1 Thresholding-Based Methods; 3.1.2 Multi-Direction GVF Snake Method; 3.2 Multichannel-Based Methods; 3.2.1 Thresholding-Based Methods; 3.2.2 ICA-Based Active-Contours Method; 3.3 Comparison of Segmentation Methods Based on Experimental Results; 4 Feature Extraction for Skin Lesion Discrimination; 4.1 Features Used for Lesion Asymmetry Characterization

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Sommario/riassunto

Since the early 20th century, medical imaging has been dominated by monochrome imaging modalities such as x-ray, computed tomography, ultrasound, and magnetic resonance imaging. As a result, color information has been overlooked in medical image analysis applications. Recently, various medical imaging modalities that involve color information have been introduced. These include cervicography, dermoscopy, fundus photography, gastrointestinal endoscopy, microscopy, and wound photography. However, in comparison to monochrome images, the analysis of color images is a relatively unexplored area. The multivariate nature of color image data presents new challenges for researchers and practitioners as the numerous methods developed for monochrome images are often not directly applicable to multichannel images. The goal of this volume is to summarize the state-of-the-art in the utilization of color information in medical image analysis.