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Review on Digital Image Processing in Biomedical Applications

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Abstract :

Every day is greater the number of images obtained to characterize the anatomy and functions of the human body; because of this the automation of the medical image processing has become a practice to improve the diagnosis and treatment of certain diseases. In this study the main areas of application of computer vision to the digital processing of medical images are reviewed. This paper gives the details about the methods of biomedical image processing and after that it also describe about medical imaging modalities. Some of the medical imaging modalities are described in this paper like X-ray imaging, CT, MRI, and ultrasound. The optical modalities like endoscopy, photography and microscopy are also more important in this field. The following steps of image analysis are explained in this paper, feature extraction, segmentation, classification, quantitative measurements and interpretation. It mainly focuses on segmentation of biomedical images, because of its high relevance. Special segmentation methods and techniques have been developed in the medical field.

Key-Words / Index Term :

Medical imaging modalities, Bacterial image analysis, automated image analysis

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