Automated Identification of Hard Exudates and Cotton Wool Spots using Biomedical image Processing

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Abstract

The automatic identification of Image processing techniques for abnormalities in retinal images. Its very importance in diabetic retinopathy screening. Manual annotations of retinal images are rare and exclusive to obtain. The ophthalmoscope used direct analysis is a small and portable apparatus contained of a light source and a set of lenses view the retina. The existence of diabetic retinopathy detected can be examining the retina for its individual features. The first presence of diabetic retinopathy is the form of Microaneurysms. This research paper describes different works needed to the automatic identification of hard exudates and cotton wool spots in retinal images for diabetic retinopathy detection and support vector machine (SVM) for classifying images. This system is evaluated on a large dataset containing 129 retinal images. The proposed method Results show that exudates were detected from a database with 96.9% sensitivity, specificity 96.1% and 97.38% accuracy

References


Index Terms

Computer Science

Image Processing
Keywords

Diabetic retinopathy Retinal images, Biomedical image Processing, exudate, CAD.