Abstract

Diabetic Retinopathy is a damage of eye caused by changes in the blood vessels of the retina. Diabetic retinopathy is one of the major problems that lead to blindness in adults around the
world today. Early detection of the disease is absolutely essential in preventing unnecessary blindness. So in this paper firstly, we performed preprocessing operations on fundus images to enhance the images, such as gray scale conversion, Median filter and lastly adaptive histogram equalization. To perform the above functions we have used database from MESSIDOR, this proposed method achieves the rate of specificity and sensitivity. So, we have proposed an automated system to detect diabetic retinopathy from retinal images and classify normal images and abnormal images as Hemorrhages and Exudates. In this approach after pre-processing, texture features are extracted from retinal images and used K-means cluster to classify and detect normal and abnormal images.

References


Index Terms

- Computer Science
- Information Science
Keywords
Diabetic Retinopathy  Fundus Images