Abstract

Diabetic Retinopathy (DR) is commonly occurring difficulty in Diabetes Mellitus (DM) patients. And therefore early detection of DR is effectively beneficial for the patient for further treatment of the disease. Appearance of the retinal blood vessel is a significant sign of diabetes. Out of many methods for detecting DR, segmentation of retinal vessels is currently found automated method for observing the state of retinal vessels. This paper reviews segmentation of retinal vessels by the application of various filters like High Pass filters, Laplacian filter, Sobel filter,
Laplacian of Gaussian filter, Gaussian match filter, Binary Matched filter and Kirsch filter. It also reviews the results of segmentation by applying the above filters to retinal fundus image from STARE database.

References

- A. Banumathi, R. Karthika Devi, Dr. (Mrs). Raju, Dr. V. Abhai Kumar, Performance Analysis of Matched Filter Techniques for Automated Detection of Blood Vessels in Retinal Images, TENCON, 543-546, 2003.

Index Terms

Computer Science  Image Processing

Keywords

Diabetic Retinopathy (dr)  Diabetes Mellitus (dm)  non-proliferative Diabetic Retinopathy (npdr)  Proliferative Diabetic Retinopathy (pdr)  Segmentation Of Retinal Image  Image Filters.