Abstract

A computerized semiautomatic system has been presented for classification of fundus photographs. This classification is based on feature vectors obtained from twin Gaussian Intensity Distribution and full width half maximum algorithm for vasculature diameter measurement. Diagnostic performance with overall sensitivity of 75% and accuracy of 93% has
been achieved using k-NN classifier and neural network both. The performance is evaluated using DRIVE database and fundus photographs from the hospital.

Reference

- Chang Hua Wu, Gady Agam, Peter Stanchev, “A general framework for vessel segmentation in retinal images”, in the Proceedings of the IEEE Internation
Classification of Fundus Photographs using Full Width Half Maximum Algorithm


Lili Xu, Shuqian Luo, “A novel method for blood vessel detection from retinal images”, Biomedical Engineering Online, pp.9-14, 2010


Index Terms

Computer Science
Pattern Recognition

Key words

Gaussian Intensity Distribution full width half maximum
fundus photographs

vasculature