The characteristics of time and frequency domains and Bayesian classification to diagnose diabetes the retina images

Fereshteh Torabi Jafroodi*,alireza sahab,

Retinal fundus images are widely used in diagnosing various types of eye diseases. One of the methods is the diagnosis of diabetes. So far, several methods have been proposed to diagnose the disease retina images. In this thesis, the Otsu threshold method and morphological methods are used for diagnosis in digital fundus retinal images. Then, by extraction of new features based on the time domain and frequency, and categorizing these features, we classify the diabetic retinopathy by using the bundle of ligaments. Classifying the level of the disease on any volunteering is a promising outcome for the development of an auto-diagnostic system for diabetic retinopathy. The experiment uses retina digital fundus images that uses the proposed method to investigate factors such as the degree of classification sensitivity.

Keywords : Retinal Fundus Images, Diabetic Diagnosis, Otsu Threshold, Feature Extraction, Time Sphere, and Frequency Domain.