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# Diabetic retinopathy diagnosis using image processing methods to detect retinal secretions

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**Diabetic retinopathy is a complication of diabetes micro-vascular disorders in the retina. There are usually no symptoms in the early stages but its severity increases over the time. Diabetic retinopathy usually have small changes in retinal capillaries. The proposed system is designed based on image processing algorithms, and its require that before everything a clear image of the retina must be available. In this work a popular database named DiaRetDB1 was used to evaluate and compare the result with the previous works. The proposed system designed using gaussian mixture model that is a probabilistic model that learn the distribution of features. Assessments have been conducted using standard criteria “Accuracy” that have 96.61%.**

**Keywords : Diabet Retinopaty, GMM, Decision Thresholding, Retina Exudates.**

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