

## SMART DIABETIC ASSESSMENT SYSTEM FOR DIABETIC RETINOPATHY USING RETINAL IMAGE EXAMINATION

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### ABSTRACT

Diabetic Retinopathy (DR) is the main cause of blindness in the world. Smart diabetic assessment System showing is suitable tool for Early Treatment of Diabetic Retinopathy Study (ETDRS) for diabetic retinopathy using retinal fundus image examination. A number of computer assisted analysis helps ophthalmologists to judgment the severity of diabetic retinopathy but still the annual screening of retinal images is very significant to perceive diabetic retinopathy(DR) by an spontaneous assessment system for examining the images through region based method, filtering techniques and thresholding methods. This article offers a review and examination on a smart diabetic assessment system for diabetic retinopathy using retinal fundus image analysis so that it can be used to indication the irregularities like microanueysms, hemorrhages, hard exudates, soft executes in the non-proliferative diabetic retinopathy.

**KEYWORDS:** Assessment, Exudates, Filtering, Region Growing, Thresholding