

EFFICIENT OBJECT TRACKING METHOD USING LBP BASED TEXTURE FEATURE AND OHTA COLOUR MOMENT

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ABSTRACT

This paper addresses a real time object tracking considering LBP based texture and Ohta based color moments as features for covariance tracking algorithm. The performance of the proposed algorithm is compared with other techniques such as the covariance object tracking with RGB features and color histograms based method in terms of detection rate and computational time. The comparisons of the performance include detection rate and computational time. These methods have been applied to four different challenging situations and the resulting experimental results show the robustness of the proposed technique against occlusion, camera motion, appearance and illumination change.

KEY WORDS: Object Tracking, Covariance Matrix, Local Binary Pattern, Ohta Colour Model, Riemannian Geometry