

Object recognition using Radon transform based RST parameter estimation

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Abstract: In this paper, we propose a practical parameter recovering approach, for similarity geometric transformations using only the Radon transform and its extended version on $[0, 2\pi]$. The derived objective function is exploited as a similarity measure to perform an object recognition system. Comparison results with common and powerful shape descriptors testify the effectiveness of the proposed method in recognizing binary images, RST transformed, distorted, occluded or noised.

Keywords : RST parameters, radon transform, object recognition