

Modified Algorithm to Obtain Translation, Rotation and Scale Invariant Zernike Moment Shape Descriptors

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The Zernike moments are used as efficient shape descriptors for images that cannot be dened by a single contour; such as trademarks. The Zernike moment descriptors have some interesting properties such as: rotation invariance and noise robustness. But these moments do not have the scale and translation invariance properties which are required for efficient shape recognition algorithms. This paper presents a modied algorithm that achieves scale and translation invariance properties as well. The experimental results show that the proposed algorithm is fast and results in a higher performance regarding the scale and translation invariance properties when compared with other available schemes reported in the literature.