

In this paper, we present rotation invariant descriptors using regional rank for texture classification. The regional rank presents the rank of the gray level of each pixel in a region whose size and shape depend on the gray level of the treaty pixel and its neighbors. Rotation invariant features are obtained by combining the rank which is found and the treaty pixel code. This latter is calculated by global thresholding. Eight discriminates and rotation invariant features are then obtained. The features size don't increase with scale and kept constant. Tests are performed on the well known Outex database. Compared to LBP method using different schemes, the proposed method achieves good texture classification performance while enjoying a compact feature representation.