Abstract

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Interest Points Matching System Based On Non-Subsampled Contourlet Transform

interest point detectionmatching is a basic computer vision task. this paper uses the non-subsampled contourlet transform (nsct) detector with some local descriptors to develop a robust interest point matching system. the nsct-based detector is very efficient in extracting relevant image features that have good localizationrich geometric information. once interest points have been extracted, invariant descriptors can be computed to represent these pointsmatch them by comparing their descriptors using similarity distance metric measure. several experiments have been conducted on a variety of datasets that compare the proposed approach to the widely used harrishessian detectors with the same local descriptors. the results show that the nsct method is efficient in natural scenes with distinctive texture, occlusionclutter objects. it offers robustness for detecting points in blurred images. it is also invariant to rotation, translation,partially invariant to scaleviewpoint angle changes.