عنوان مقاله:

Recognition of Periodic Motions UsingOne-Dimensional Contour Based Features

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خلاصه مقاله:

In this article, a new method for detecting periodicmotions in image sequences based on one-dimensional featuresis presented. The method starts by the detection of movingobject in the consecutive frames. Then the contours of themoving target are extracted and one-dimensional features areconstituted. The features are based on the calculated distancefrom target contour to its bounding box sides in four directions.By applying the autocorrelation to the calculated distances,four one-dimensional curves are obtained and the periodicity ofthe target motion is evaluated. The proposed algorithm wastested with a database of 100 videos and experimental resultsshowed the efficiency of the proposed algorithm.

کلمات کلیدی:

Autocorrelation, human motion, periodic andnon-periodic motion