Abstract

Video forgery, also referred as video falsifying, is a technique for generating fake videos by altering, combining or creating new video contents. Exemplar-based inpainting technique can be used to remove objects from an image/video and play visual tricks, which would affect the authenticity of videos. In this paper, a blind detection method based on zero-connectivity feature and fuzzy membership function is proposed to detect the video forgery. Firstly, the forged video is converted into frames, then zero-connectivity labelling is applied on block pairs to yield matching degree feature for all blocks in the forged region and construct ascending semi-trapezoid membership for computing fuzzy membership function. Finally, the tampered regions are identified using a cut set.
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Index Terms

Computer Science
Pattern Recognition

Keywords

Video forgery    Exemplar-based inpainting    Zero-connectivity labelling    Fuzzy Membership

cut set