Copy-move forgery is emerging as one of the research topic among researchers in the area of image forensic. Copy-move forgery is basically concerned with duplicating one region in an image by pasting certain portion of the same image on it, many techniques have been used to detect such type of forgery. In this paper an enhanced way to detect copy-move forgery is proposed. The proposed method use both block based method like Discrete Wavelet Transform (DWT) and feature based method like Scale Invariant Feature Transform (SIFT) to increase the robustness and accuracy of copy-move forgery detection. First of all DWT is applied on a given image to decompose the image into four parts LL, HL, HH and LH, Since LL part contains most of the information, so SIFT is applied to LL part only to further extract the key features of the image and match those features by using inter block matching and find the similar portion or parts between the images and marked them as forged. This method detect whether image forgery is occurred or not and also highlight the forgery more accurately.

Abstract

Copy-move forgery is emerging as one of the research topic among researchers in the area of image forensic. Copy-move forgery is basically concerned with duplicating one region in an image by pasting certain portion of the same image on it, many techniques have been used to detect such type of forgery. In this paper an enhanced way to detect copy-move forgery is proposed. The proposed method use both block based method like Discrete Wavelet Transform (DWT) and feature based method like Scale Invariant Feature Transform (SIFT) to increase the robustness and accuracy of copy-move forgery detection. First of all DWT is applied on a given image to decompose the image into four parts LL, HL, HH and LH, Since LL part contains most of the information, so SIFT is applied to LL part only to further extract the key features of the image and match those features by using inter block matching and find the similar portion or parts between the images and marked them as forged. This method detect whether image forgery is occurred or not and also highlight the forgery more accurately.

References


**Index Terms**

Computer Science  Image Processing

**Keywords**

Digital Image Forgery; DWT (Discrete Wavelet Transform); SIFT (Scale Invariant Feature Transform).