Abstract

In the digital era of where everyone is exposed to a visual imagery in very large extent. Digital images are very convincible way to share information. Due to the rapidly growing field of digital image acquirement and editing software that are impressive as well sophisticated with many advanced features. Manipulation with features of digital image can perform easily with the help of editing tools, which are cost effectively available online or offline and do not leave any visible footprint of tampering with an image. Forgery with the digital image is an unavoidable problem concern with the image authenticity and also with image integrity. Which raising a compulsion to take an immediate action on the forgery of the digital image to verify the authenticity and maintain the integrity. To encounter the problem of authenticity of digital image, this paper proposed a methodology for detection of image splicing forgery using the blind approach i.e., passive method to detect the spliced region in the digital image. In passive approach, there is no provision for the pre-introduction of the watermark and pre-embedded digital signature during the time of image obtainment. This paper mainly concern with the image splicing forgery and it initiate with the DWT (Discrete Wavelet Transform) method, which will decompose the
image into sub images and obtain coefficient for each sub image. After that for feature extraction we will use SURF (Speed-Up Robust Features) and finally SVM (Support Vector Machine) will perform classification for splicing forgery detection in digital image.

References


23. The dataset mentioned in the paper is freely available to reader at the address [online]. Available: http://forensics.idealtest.org/casiav1/

24. The dataset mentioned in the paper is freely available to reader at the address [online]. Available: http://forensics.idealtest.org/casiav2/

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Index Terms

Computer Science Security

Keywords

Digital image forgery, Tampering detection technique, Copy-move forgery, Splicing forgery,
Image retouching, DWT, SVM, SURF