

Texture-Based Image Forensics from Video Frame

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Abstract : With current technology, images and videos can be obtained more easily than ever. It is so easy to manipulate these digital multimedia information when obtained, and that the content or source of the image and video could be easily tampered. In this paper, we propose to identify the image and video frame by the texture-based approach, e.g. Markov Transition Probability (MTP), which is in space domain, DCT domain and DWT domain, respectively. In the experiment, image and video frame database is constructed, and is used to train and test the classifier Support Vector Machine (SVM). Experiment results show that the texture-based approach has good performance. In order to verify the experiment result, and testify the universality and robustness of algorithm, we build a random testing dataset, the random testing result is in keeping with above experiment.

Keywords : multimedia forensics, video frame, LBP, MTP, SVM

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