Abstract

When network and storage devices become more popular, the digital data more easily and more quickly will be distributed. Can be easily pirated copy and did not limit a large number of multimedia information (images, audio and video). Therefore, people are increasingly concerned about the protection of intellectual property rights of multimedia. Digital watermarking is a useful and the development of the technology; it is direct information in the original additional information embedded in the technology. Ideally, the digital watermark is added to the data and the original data should be no visual difference, and the digital watermark cannot be protected information not in the case of damage easily be removed or modified. In this paper we propose a three robust and semi-blind digital video watermarking algorithm. These algorithms are based on hybrid transforms using the combination of Discrete Cosine Transform (DCT) and Singular Value Decomposition (SVD), Discrete Wavelet Transform (DWT) and Singular Value Decomposition (SVD) and Discrete Cosine Transform (DCT), Discrete Wavelet Transform (DWT) and Singular Value Decomposition (SVD). The original video is divided to number of frames. On one frame we apply a correspond three hybrid transform algorithms. The process is repeated for all the reaming frames. The performance of the
The proposed algorithms was evaluated with respect to imperceptibility and robustness. The results show that the proposed algorithms give a good Peak Signal to Noise Ratio (PSNR), however their performance varied with respect to robustness.

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Index Terms

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Keywords

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