

Digital Watermarking Based on Visual Cryptography and Histogram

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Abstract : Nowadays, robust and secure watermarking algorithm and its optimization have been need of the hour. A watermarking algorithm is presented to achieve the copy right protection of the owner based on visual cryptography, histogram shape property and entropy. In this, both host image and watermark are preprocessed. Host image is preprocessed by using Butterworth filter, and watermark is with visual cryptography. Applying visual cryptography on water mark generates two shares. One share is used for embedding the watermark, and the other one is used for solving any dispute with the aid of trusted authority. Usage of histogram shape makes the process more robust against geometric and signal processing attacks. The combination of visual cryptography, Butterworth filter, histogram, and entropy can make the algorithm more robust, imperceptible, and copy right protection of the owner.

Keywords : digital watermarking, visual cryptography, histogram, butter worth filter

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