Advancement in communication medium is producing large volume of digital information which needs to be protected. Watermarking is a technique that is used to hide secret signal into digital signal in a manner that does not reduce overall quality of the original signal. In relation to digital image watermarking, another area that is drawing attention is the multiple watermarking, where more than one watermark is embedded into single multimedia object. Multiple watermarks are
normally proposed as a method to provide extra security to an image by embedding two or more secret messages into the cover image. In the present research work, the concept of multiple watermarking is used to hide both copyright and authentication information into a color image. For this purpose a wavelet transformation based on texture properties and secret sharing using visual cryptography is used. Experimental results indicate that the proposed watermarking scheme is highly robust and does not degrade the original signal.

Reference

Multiple Watermarking Scheme for Image Authentication and Copyright Protection using Wavelet based Texture Properties and Visual Cryptography


Index Terms

Computer Science Security
Keywords

Discrete Wavelet Transformation

Visual Cryptography

Fingerprint

Human Visual System

Adaptive Order Dithering Algorithm