Digital Color Image Watermarking using DWT and SVD for Data Security

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Authors:
Ayushi Potfode, Deepak Kourav,

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Abstract

Now a day’s internet plays a vital role in carrying information from one place to another. This information which is transmitted is digital multimedia which include images audio and also video. Attacking of digital data is very easy and easily monitored by anyone through the internet. Therefore in order to protect these attacks several intellectual rights have been introduced nearly fifty years ago. This results in the evolution of digital watermarking. Watermarking of images can be done in various domains such as spatial domain, frequency domain, and wavelet domain. In watermarking is a technique of embedding a secret message in a cover message. When media is watermarked the secret message is usually a copyright message.

Watermarking does discourages intellectual property theft and help us to prove ownership when such a theft occurs. This survey paper describes digital watermarking in detail and explains theory, techniques and its applications especially to digital libraries. This paper tells about digital image watermarking scheme with blind detection for copyright verification. The binary watermarks are embedded in the wavelet domain of an image using the discrete wavelet
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package transform (DWPT) and quantization of the selected dominant coefficients. In our algorithm largest value of coefficients is at same blocks of watermark embedding process will be selected during the watermark extraction. Therefore we doing need the original image for watermark extraction process. It is a blind detection technique. It saves time and space for transferring of original image respectively experimental result show that the proposed techniques are robust to Gaussian noise and jpg compression. These propose method is designed robust against these attacks and based on blind detection, Therefore it can be used in copyright verification effectively.

References


Index Terms

Computer Science

Security

Keywords
Color, wavelet, watermark, DWT.