Abstract

Digital Watermarking has become essential in today’s scenario because lots of digital data has become distributed all over the internet. The access to internet has become very simple and inexpensive for users in the past 15 years due to the rapid technological advancement. Therefore the possibility for the various digital attacks like forgery, damaging the digital data, stealing, copying and alteration of the digital information has also increased. In such situations, it has become significant to use a protecting mechanism that can protect the digital data and its copyright protection of the owner of digital data. Digital watermarking is a very efficient solution to this problem. Digital watermarking is a technique that embeds a watermark in the host digital data that stores the copyright information about the data. The proposed watermarking scheme is implemented in frequency domain using wavelet transform. In this paper, db wavelets are analyzed for the watermarking schemes. There are 45 db wavelets, each of them is analyzed with respect to watermarking scheme and resultant db wavelets are given as the output which wavelets are supporting the watermarking scheme. Each of the resultant wavelet is tested against the quality parameter such as Mean Square Error, Maximum Difference, and Normalized Cross Correlation, Structural Count, and Normalized Absolute Error and Peak-Signal-To-Noise ratio.
Analysis of Wavelets with Watermarking through Wavelet Transformation

References

- Ning Bi, Qiyu Sun, Daren Huang, Zhihua Yang, and Jiwu Huang, "Robust Image Watermarking Based on Multiband Wavelets and Empirical Mode Decomposition", IEEE TRANSACTIONS ON IMAGE PROCESSING, VOL. 16, NO. 8, AUGUST 2007.
- Dr. S. S. Bedi, Mrs. Jyoti Agarwal, Pankaj Agarwal, "Image Fusion Techniques and Quality Assessment Parameters for Clinical Diagnosis: A Review", International


**Index Terms**

Computer Science  
Image Processing

**Keywords**

Watermarking  
Embedding Algorithm  
Extraction Algorithm  
Discrete Wavelet Transform  
Db wavelets