Abstract

This paper presents an efficient watermarking technique based on Discrete Wavelet Transformation (DWT), Singular Value Decomposition (SVD) and Rail Fence methods that are applied on grey scale and digital color images. First of computation of 10's complement and rail-fence method is applied on watermark image that results in modified watermark image. The singular values of a modified watermark image are embedded in singular values of the LL1 sub-band coefficients of the host image by using scaling factors. Thus as a result the robust watermarking scheme is used to provide security to the watermark image. This proposed method will helpful for copyright protection and ownership identification. This approach leads to secure transmission and broadcasting of digital data.
Efficient Watermarking Technique using DWT, SVD, Rail Fence on Digital Images

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Index Terms
Computer Science
Image Processing

Keywords
Discrete Wavelet Transform  Singular Value Decomposition  Rail-fence  10's Compliment