Abstract

Digital watermarking is a technique for inserting ownership information to the digital data to prove the authenticity. A digital watermarking is perceptually invisible to prevent obstruction of the original image. It is also used for tamper proofing, broadcast monitoring, covert communication etc. In this paper, a wavelet-based watermarking approach for hiding watermark image in color host images is proposed. The host image is converted into YIQ color space and then Y channel decomposed into wavelet coefficients. This proposed methodology overcomes the drawback of the existing approaches and enhances the security by applying Arnold transform and Fibonacci transform for embedding the resultant pattern in the host image. The watermark embedding process does not degrade the visual quality of the image.
Digital Image Watermarking using Fibonacci Transform in YIQ Color Space

- http://www.mathworks.in/help

Index Terms

Computer Science

Image Processing
Keywords

3-level DWT   Arnold transform   Fibonacci Transform.