Abstract

Today is an era of the Internet. The day is not so far when the whole data of the world will travel on the internet. So, authentication is required to protect the content of the data against unauthorized copying and replication. Information hiding via digital watermarks for the multimedia data plays a vital role in protecting the data. Watermarks are imperceptible and it is a predefined pattern inserted into the multimedia data to protect its authenticity. The watermark indicates that data is containing a copyright or not. The main focus of researchers is to develop an algorithm which has robustness against attacks and induced embedded distortions. Many digital watermarking mechanisms have been proposed in spatial and transform domain. The hybrid approaches of combining different transform domain techniques have garnered attention recently. This paper presents design of digital image watermarking using hybrid 3-level DWT-FFT technique via image compression for better results as compared to previous techniques of information hiding.

References

Index Terms

Computer Science Security

Keywords

Digital Image Watermarking, Robust Watermarking, Discrete Wavelet Transform (DWT), Fast Fourier Transform (FFT), Fractional Fourier Transform (FRFT), Peak Signal to Noise Ratio (PSNR), Joint Photographic Expert Group (JPEG)