Abstract

A method for establishing the identity of an individual is essential in all transactions whether they are commercial or personal. The ability to establish identity with certainty can prevent fraud or forgery. In the midst of an electronic revolution, this remains a major concern in ecommerce, telecommunications, healthcare, and security. In this paper, we present a novel method for biometric image watermarking using the biorthogonal wavelet transform and authentication of the recovered signature from the image data. In proposed approach the offline signature, which is a biometric characteristics of owner is embedded in second level detailed coefficients of discrete wavelet transform of cover image. The novelty of the proposed scheme is that, it also goes a step further wherein it extracts the features of recovered signatures and does the template matching with features of signature data base.
Reference

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Index Terms

Computer Science

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Key words

Biometric watermarking

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template matching

Hough transform

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Offline Handwritten Signature based Blind Biometric Watermarking and Authentication Technique using Biorthogonal Wavelet Transform