

## عنوان مقاله:

A Modified Digital Image Watermarking Scheme Based on Nonnegative Matrix Factorization

## محل انتشار:

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## خلاصه مقاله:

This paper presents a modified digital image watermarking method based on nonnegative matrix factorization. Firstly, host image is factorized to the product of three nonnegative matrices. Then, the centric matrix is transferred to discrete cosine transform domain. Watermark is embedded in low frequency band of this matrix and next, the reverse of the transform is computed. Finally, watermarked image is obtained by multiplying nonnegative matrix components. The experimental results show that the proposed method is transparent and also is high robust against JPEG compression, scaling and median filter attacks.

## کلمات کلیدی:

Digital image watermarking, Nonnegative matrix factorization, Robustness, Transparency

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/488368>

