

Wavelet-Based Image Watermarking Using the Genetic Algorithm

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Abstract. Image watermarking provides copyright protection of digital image by hiding appropriate information in the original image in such a way that it does not cause degradation of the perceptual image quality and cannot be removed. The watermarking methods for transform domains are usually achieved by using the discrete cosine transform or the discrete wavelet transform. In this paper, we develop a technique for optimizing the image watermarking using the genetic algorithm applied to the wavelet transform domain to improve the quality of the watermarked image and the robustness of the watermark. We then compare our experimental results with the results of previous works.