

عنوان مقاله:

Steganalysis of LSB Matching and Revisited Version Based on Empirical Matrix

محل انتشار:

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خلاصه مقاله:

In this paper we present a method for steganalysis of LSB matching and revisited LSB matching. We construct feature vectors from empirical matrix of an image in spatial domain which some of its most significant bit planes were deleted. By this preprocessing in addition to reducing the dimension of feature vector also it preserves effects of embedding. There is trade off between the number of biplanes which can be deleted (for reducing the dimension of feature vectors) and performance of steganalytic method. We investigate how LSB embedding methods affects the bit planes of an image and examine different cases (deletion of bit planes) for obtaining a good performance. We use FLD classification and test our algorithm on different embedding rates. We compare our scheme with the current LSB matching steganalysis methods. It is shown that the proposed scheme outperforms the state-of-the-arts in detecting .LSB steganographic methods for gray scale images

كلمات كليدي:

Empirical Matrix, LSB Matching, Revisited LSB Matching, Steganography, Steganalysis

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