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Abstract

The attainment incompetence of extracting the original image is one of the most challenging tasks in digital image watermarking methods. When an image is embedded into another image, this increases more complications. To overcome this problematic scenario, this paper proposes a Fuzzy based Quad Tree Segmentation (F-QTS) method. In this paper, a binary logo image is embedded into a RGB cover image. Due to the embedding data is an image, Quad Tree Segmentation method is applied in both the images in order to allocate the blocks for logo image. This space allocation is empowered by Fuzzy Rules and the binary logo image is embedded into the R-plane of the cover image. Moreover, performances of the proposed watermarking method is evaluated with the various watermarking attacks and presented in terms of PSNR (Peak signal-to-noise ratio).

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Index Terms

Computer Science Security

Keywords

Watermarking digital image Fuzzy Rule Quad Tree Segmentation embedding attacks

PSNR

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