Abstract

In this paper, a completely unique reversible data hiding (RDH) algorithmic rule is projected for digital images. Rather than attempting to keep the PSNR value high, the projected algorithmic rule enhances the contrast of a host image to boost its visual quality. The best 2 bins within the histogram are selected for information embedding in classify that histogram equalisation determination be execute by repeating the method. The side info is embedded in conjunction with the message bits into the host image so the initial image is totally retrievable. The projected algorithmic rule was implemented on 2 sets of images to demonstrate its efficiency. To our greatest knowledge, it's the primary algorithmic rule that achieves image contrast enhancement by RDH. Moreover, the analysis results show that the visual quality is preserved once a considerable amount of message bits have been embedded into the contrast-enhanced images, even higher than 3 specific MATLAB functions used for image contrast enhancement.
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Index Terms

Computer Science          Image Processing

Keywords

Contrast enhancement, histogram modification, location map, reversible data hiding, and visual quality.