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# Generation of pseudo-color images in medical images

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A method for improving the quality of endoscopic images is presented by adjusting the fuzzy histogram and contrast anisotropic distribution. The endoscopic images in our country do not have a good status in terms of light and quality, and this has become a challenge for the diagnosis of various gastrointestinal diseases. To overcome these problems and help physicians to better diagnose, this paper presents an ad hoc methodology using fuzzy histogram modulation and contrast distribution. The proposed method also introduces a new concept of contrast distribution based on local analysis of endoscopic images. Then, by the proper ion of the guiding parameter that plays an important role in the distribution, the contrast distribution is applied to improve the image quality of the endoscopic images, and finally, after transferring to three color spaces XYZ, YIQ and HSI, using the fuzzy histogram adjustment method , Subtle changes to the color become more prominent. Experimental results show that the proposed method shows a significant performance in increasing the visibility of endoscopic images.

**Keywords :** **Keywords:** Endoscopic Images, Contrast Anisotropy Distribution, Fuzzy Histogram Adjustment

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