Abstract

This paper presents a novel approach which address contrast enhancement in color images. The wavelet transform decomposes an image into bands that vary in spatial frequency and orientation. The HSV color model is well suited for color image enhancement methods even though RGB color space is the predominant one. By using Daubechies D4 wavelet transformation and HSV color model, a novel method of color image enhancement based on luminance adjustment is proposed here. The proposed method not only enables approximating digital signals in a better way but also it approximates highly non-linear digital signals. The experimental results showed that this new method can enhance color images effectively.

References

Index Terms

Computer Science

Image Processing

Keywords

Colour Image Enhancement Daubechies Wavelet Transform HIS Analysis Histogram Equalization luminance enhancement HSV color space wavelet transform