Abstract

Evaluation of images, after processing, is an important step for determining how well the images are being processed. Quality of image is usually assessed using image quality metrics. Unfortunately, most of the commonly used metrics cannot adequately describe the visual quality of the enhanced image. There is no universal measure, which specifies both the objective and subjective validity of the enhancement for all types of images. This paper is a study of the various quantitative metrics for enhancement against changes in contrast and sharpness of both general and medical images. A new metric is proposed that is useful for measuring the improvement in contrast as well as sharpness. It is computationally simple and can be used for all types of images.

References

IEM: A New Image Enhancement Metric for Contrast and Sharpness Measurements

biomedicine, 15:918 – 928, Nov. 2011.

Index Terms

Computer Science
Signal Processing
Keywords

Image enhancement  Image Quality Assessment(IQA)  Full reference metric  Blind reference metric

Human Visual System(HVS)

Image Enhancement Metric(IEM).