Abstract

Contrast enhancement is one of the widely used techniques for image enhancement. In this technique, contrast of an image becomes better to make the image more acceptable for well human vision. There are several techniques that can be process for contrast enhancement but the most common one is the histogram equalization (HE) for its simplicity. The HE technique remaps gray levels of image according to probability distribution function (PDF). HE spreads the histogram and extends dynamic range of gray levels to accomplish overall contrast enhancement but the drawbacks are excessive change in brightness, excessive contrast enhancement, washed out appearance, loss of naturalness of an image, loss of image details, not displaying the actual appearance of the image so it is not suitable for consumer electronic applications. This paper shows the study of various histogram modifying techniques to overcome these drawbacks in a greater extend.

Index Terms

Computer Science

Image Processing

Keywords

Dynamic histogram equalization

Contrast enhancement

Brightness preservation

Histogram partition