Random Walker Segmentation based Contrast Enhancement of Dark Images with Canny Detection

Abstract

Contrast enhancement is a technique which enables images to improve the contrast level of images. Contrast enhancement of images requires filtering of regions where contrast level is high or where noise level is more. The techniques such as non-dynamic based stochastic resonance are implemented but the technique provides less accuracy of contrast improvement. Hence an efficient technique is implemented here by segmented the low contrast region of the image and then filtering is performed on the segmented region using transformation. The proposed methodology greatly improves the contrast enhancement of the images.

References

- Erkan Bostanci, Nadia Kanwal, Adrian F. Clark, ”Spatial Statistics of Image Features for Performance Comparison”; IEEE TRANSACTIONS ON IMAGE PROCESSING, VOL. 23, NO. 1, JANUARY 2014.

Index Terms

Computer Science
Image Processing

Keywords
DWT Bilateral Filtering Gaussian Noise Segmentation Mosiac images.