Biomedical Image Fusion & Segmentation using GLCM

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Abstract

In this paper we present a new fusion technique to increase the information content of the fused image. We propose information fusion by maximizing the wavelet entropy using windowing technique. It helps to diagnose the diseases like tumor, cancer ... etc effectively. The images are decomposed by wavelet transform and using maximum selection rule the low frequency and high frequency bands are fused. After fusion the entropy is maximized using windowing technique. Using IDWT the fused image is resulted. The affective area in fused
image is isolated and analyzed using GLCM based segmentation. GLCM based segmentation preserves the discontinuity and edge information better than other segmentation techniques.

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Index Terms

Computer Science Image Processing
Key words

Image fusion
Wavelet Transform

MS rule

GLCM