Abstract

Segmentation is an important concept in image processing with an objective of dividing the image into regions and characterizes the structures with some input features, so that the output image is meaningful and easier to analyze. A large number of algorithms have been proposed in various application areas. In medical field the segmentation plays an important role helping doctors to take appropriate decisions. Identifying the region of interest is an important task in the medical field. Soft tissue of human bodies can be produced using the Magnetic Resonance Images. In this paper brain image segmentation is done using the K-Means, Fuzzy C-Means, Otsu Thresholding and morphological closing and reconstruction. Performance measuring parameters such as Structural content, mean square value, peak to signal ratio, Average difference Results obtained are satisfactory.

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Index Terms

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Segmentation, K-Means, Fuzzy C-Means, Otsu Thresholding, PSNR, MSE, Structural Content.