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

References

1. Sujata saini and Komal Arora “Study Analysis on the different Image segmentation
Implementation and Comparison of Different Segmentation Techniques for Medical Images

Techniques” international journal of information and computation ISSN 09742239 volume 4, Number 14(2014), pp 1445-1452.


Implementation and Comparison of Different Segmentation Techniques for Medical Images

14, 1644–1649.


27. Benjamin Irving, Paul Taylor, and Andrew Todd-Pokropek “3D segmentation of the airway tree using a morphology based method” EXACT’09 -297


Index Terms

Computer Science

Image Processing
Keywords

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