Abstract

Brain MRI (Magnetic Resonance Imaging) images are used to diagnose any abnormality associated with human brain by the physicians. But these images are often corrupted with noise which makes it difficult to diagnose any abnormality in initial stage of defect. Image processing techniques like image segmentation is used to extract important information out of noisy MRI images. But image segmentation process will also remove original minute details available in original image apart from noise because entire image will be clustered into few segments of same pixel intensity. In this paper a selective brain MRI image segmentation is proposed based on Fuzzy C Mean (FCM) Clustering algorithm with image pixel weightage to retain necessary original image details intact.

References

3. MS Mahaley Jr, C Mettlin, N Natarajan… - Journal of Neurosurgery, 1989 - thejns.org
7. Distance regularized level set evolution and its application to image segmentation. C Li, C Xu, C Gui, MD Fox - Image Processing, IEEE ..., 2010 - ieeexplore.ieee.org
11. Interpretation of the Correlation Coefficient: A Basic Review, Richard Taylor, EdD, RDCS, Cardiac Laboratory, Logan General Hospital, Logan, WV 25601.

**Index Terms**

Computer Science

Algorithms

**Keywords**

K-Mean, membership matrix, Cluster center, Objective function.