Brain tumor segmentation using k-means–FCM hybrid technique

Patel Vaibhavi, Kapdi Rupal

Abstract

Automatic brain tumor segmentation and detection is always very challenging and difficult task with respect to accuracy which is more important as brain surgery is a critical and complicated process. The medical professional can interpret magnetic resonance images (MRI), but this task is time-consuming, error-prone and tedious. So automatic segmentation technique is needed which is the unsolved challenging problem. In this paper, study of the different algorithms used for the brain tumor segmentation is done and a hybrid algorithm of K-means and FCM algorithm is implemented. The result of proposed algorithm is compared with the individual results of K-means and FCM algorithm.