

## **132. BRAIN TUMOR DETECTION USING K-MEAN BASED ON OBJECT LABELING ALGORITHM**

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We propose an efficient brain tumor detection method, which can detect tumor and locate it in the brain MRI images. This method extracts the tumor by using K-means algorithm followed by object labeling algorithm. Also, some preprocessing steps (median filtering and morphological operation) are used for tumor detection purpose. It is observed that the experimental results of the proposed method gives better result in comparison to other techniques. The diagnostic accuracy of this method established with an error rate of 0.0012 and accuracy of 94%.

Keywords: Image segmentation, median filtering, morphological operation, k-mean clustering, object labeling algorithm.

*Journal of Science and Innovative Engineering & Technology*