Abstract

This paper has dedicated to brain tumor detection algorithm. The majority of the existing work with tumor detection has neglected the using object-based segmentation. Thus this paper has planned an effective brain tumor detection using the feature detection and roundness metric. To boost the tumor detection rate further we've incorporated the proposed hybridization of fuzzy C-means and region growing segmentation based tumor detection with the use of trilateral filter in its preprocessing stage. The planned method has the capability to generate efficient results even in the event of large occurrence of the noise. The experimental results have obviously shown that the planned method outperforms over the available techniques.

References


Index Terms

Computer Science          Artificial Intelligence

Keywords

Brain Tumor, Segmentation, Fuzzy C-means, Region growing, Trilateral filter.