Abstract

Segmentation of an image is the division or separation of the image into disjoint regions of similar feature. In clinical practice, Magnetic Resonance Imaging (MRI) is used to distinguish pathologic tissue from normal tissues, especially for the detection of brain tumors. Among the thousands of segmentation methods, clustering algorithm is one of the powerful tools in segmenting medical images. In this paper we proposed a new approach based on Hybrid Topology Preserving Map (HTPM) and Adaptive Mean Shift (AMS) algorithm which combines the advantages of both mean shift based clustering algorithm and Hierarchical Topology Preserving Map. And also the performance of the proposed method is compared with the traditional method Adaptive Mean Shift (AMS) algorithm.

References

- B. Chanda, D. Dutta Majumder, 2008 Digital Image Processing and Analysis, Prentice
Hall of India Pvt. Ltd.

Index Terms
- Computer Science
- Pattern Recognition

Keywords
- AMS
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