Abstract

Under the scope of this paper an algorithm has been developed which takes the gradient differential as main criteria for identification of the brain tumor. The algorithm also tries to skip the areas of brain which do not suits the criteria of high intensity and high entropy as these are the main two characteristics of tumor area. Finally, the image is reconstructed using extended maxima transformation and regional maxima are found, and finally we get the most susceptible part of tumor. The results have shown that the algorithm takes only 3.98 seconds on an average to identify the tumor and has good accuracy in terms of identification of tumor.
Brain Tumor Detection, Demarcation and Quantification via MRI

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**Index Terms**

Computer Science  
Image Processing

**Keywords**

Tumor  
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boundary  
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and extended maxima transform.