Abstract

In this paper, we have proposed a novel method of content based image retrieval using combination of color histogram and wavelet techniques. We have used RGB color space to exploit the color features of image both for color histogram and wavelet decomposition of images. F-norm theory is used to extract features from wavelet transformed image. For histogram technique Euclidean distance is used and for wavelet technique F-norm theory based criteria is used to calculate similarity. We have shown that how individual techniques perform and have given approach to use both techniques in combination. Using recall rate it is shown that results have improved when both techniques are used together. We have also implemented the system in parallel and using speedup parameter it is shown that it has reduced the processing time making it practically useful in real world applications.

References

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**Index Terms**

Computer Science  
Image Processing

**Keywords**  
CBIR  RGB  Histogram  Wavelets  Haar Wavelet  Parallel  Threads  Recall Rate etc