Abstract

Content Based Image Retrieval is a very dominant area which uses the perceptible contents of the image such as color, texture and shape combines to represent the features of the image which is discussed in this paper. Operative research in CBIR is engaged towards the advancement of different methodologies for analyzing, explaining, cataloging and indexing the heavy databases. The proposed scheme is based on three algorithms: Color distribution entropy(CDE),Color level co-occurrence(CLCM) and Canny edge detection+hue moments. CDE considers the correlativity of the color spatial distribution of an image or we can say effectively tells the spatial color information of images. CLCM takes in account the texture features of an image, whose base is from the old algorithm grey level co-occurrence...
matrix (GLCM) which only takes the grey level images but in CLCM it takes colored texture images, it is a colored alternative to old texture recognizing GLCM. And Canny edge detector is used for detecting the edge of an image with hue moments which are frequently used as shape extraction feature considering its qualities of in variance under translation, changes in scale and rotation. The proposed scheme achieves a higher retrieval result by taking these diverse and primitive image descriptors which relates to better retrieval result. The similarity measure matrix is both Euclidean and Manhattan distance.

References


- C. Yang and X. Gu, "Combining pcnn with color distribution entropy and vector gradient in feature extraction." The 8th IEEE International Conference on Natural Computation (ICNC), 2012, pp. 207–211.


Index Terms

Computer Science
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Keywords
Canny Edge Detection  Color Distribution Entropy  Similarity Matching  Co-occurrence
Matric