Abstract

Content Based Image Retrieval (CBIR) is an active research field in the past decades. Against
the traditional system where the images are retrieved based on the key word search, CBIR
systems retrieve the images based on the visual content. Even though some of the modern
systems like relevance feedback system which improves the performance of CBIR systems
exists, the importance of retrieving the images based on the low level features like Colour,
Texture and Shape still determine the development of CBIR systems and cannot be
undermined. Colour Histograms, Histogram Distance Measurements, Colour Spaces and
Quantization play an important role in retrieving images based on similarities. In this paper, a
novel method is presented for determining the efficiency of different quantization methods using
HSV Colour space and measuring the Vector Cosine Angle distance of the images with different
sizes of images like 256 X 256, 128 X 128, 64 X 64, 32 X 32, 16 X 16 and 8 X 8 pixels for
efficient image retrieval and comparing the time utilized for retrieval in each sizes and
measuring the Overall efficiency.

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**Index Terms**

Computer Science  
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**Keywords**

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quantization