

# **Efficient Image Retrieval with Combination of Visual Contents Features**

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## **Abstract**

*Retrieval of an image is a more effective and efficient for managing extensive image database. Content Based Image Retrieval (CBIR) is a one of the image retrieval technique which uses user visual features of an image such as color, shape, and texture features etc. This system presents the combination of the three visual contents features i.e. color, texture and shape information to achieve higher retrieve efficiency. Color features are extracted by using HSV (Hue-Saturation-Value) color histogram and Gray Level Co-occurrence matrix (GLCM) calculates the feature vector for texture. Canny edge detection algorithm is used for edge detection to calculate the feature vector for the shape. The system developed an algorithm which incorporates all three features such as color, texture and shape to improve the performance of retrieval of images. The experimental results demonstrate the efficiency of the method.*