ABSTRACT

Content Based Image Retrieval (CBIR) uses the image features like visual contents of an image. The visual contents is having two types global features-color feature, shape feature, texture feature, and local features-spatial domain features to signify and index the image that divide the image into sub regions horizontal, vertical and center region. CBIR method combines global and local features. In this work the Discrete Wavelet Transform (DWT) is used to transform spatial domain image to frequency domain by using high pass and low pass filter. in that different color feature extraction is also used for color feature extraction like histogram , color correlogram and color moments which extracts the feature of query image. Gray Level Co- occurrence Matrix (GLCM) for texture feature extraction. By combining this entire feature using query image feature one vector value is generated and using this query image feature the dataset is generated for all images. The dataset is attached in GUI and query image each time extract the features. After this classification process uses Support Vector Machine (SVM) and generates confusion matrix for right and wrong classification. The experimental results calculated using mean, standard deviation, precision and recall it shows improved results in comparison to previous methods. The proposed work gives the advantages over previous methods it also improve the exactness of recovery.

***Keywords*:** CBIR; DWT; GLCM; Global feature; Local feature; Color Correlogram; Color Histogram; SVM; Standard Deviation; Confusion matrix.