Abstract

Image search process either offline or online is often done when people need to find the desired image, but image search results are often different from what people want, this is because the general image retrieval system that people used was text-based, different if the system has apply the image search with visual reading characteristics of the query image and then compare it with the image in the database, this image retrieval system is what we call Content-Based Image Retrieval (CBIR), CBIR system is implemented in this final task is to extract characteristic features from the feature set of image colors by using the Color Correlogram, texture features by using the Wavelet Transform, and shape features by using the Multiscale Fourier Descriptor. Then by using the Euclidean Distance is, the distance of similarity between the query image with the image database can be calculated. So that we can get the best retrieval results image with the smallest similarity distance difference. Nine object imagery used are building, flower, bus, dinosaur, elephant, mountain, horse, food, and beach. Then do the comparison of each parameter extraction method to determine the influence of each parameter. And based on test results, the extraction using three extraction methods together providing better accuracy results than using only one of three methods of feature extraction.

Keywords: Content-Based Image Retrieval, Color Correlogram, Wavelet Transform, Multiscale Fourier Descriptor, Euclidean Distance.