

Abstract

Content Based Image Retrieval is a method to obtain images of documents relevant to a given query image according to the content contained within the image. Contents in an image are characteristic of color, shape, and texture. Localization of the query is an approach to localize the query only on the region made by *user*. The expectation of this approach is *user* can get more relevant images according to their needs with this localization of the query.

In this thesis, a CBIR system implemented by combining the extraction of characteristic color using Scalable Color Descriptor (SCD) and the texture feature extraction using HistogramDescriptor Edge (EHD). CBIR system is equipped with the Localization of the query to produce a goal as mentioned above.

Similarity between the query image with images in the database are calculated by combining the similarity values characteristic color and texture features of the method of weighting. Conclusion of the test results of four different image class is a optimal status for MAP value and number of *retrieved* relevant documents is obtained by balancing the weight of characteristic color and texture characteristics. The result from the second scenario of application testing proves the more spesific selected region, the higher MAP value and amount of *retrieved* relevant documents.

Key words: localization of a query, CBIR, Mean Average Precision