Abstract

Content-based Image Retrieval (CBIR) is new searching mechanism that is very efective, because it is implemented by measuring the similarity between primitives extracted from query image with primitives stored in the database. Texture is one of important feature in this area.

This final project performs Texture-based Image Retrieval (TBIR) system with Gabor filter as texture extractor. The implementation of Gabor filter on an image provides energy map at different scale and different orientation. Texture is represented as a vector, created using mean and variance of energy map. Similarity measurement of two images is determined by their vector distance. The experimental results gained from this final project show that Gabor filter works well on images with dominant prominent texture, especially on images with homogenous texture.

Keywords: *texture, TBIR, Gabor filter, mean, variance.*