

ABSTRACT

COMPARATIVE ANALYSIS OF CONTENT-BASED IMAGE RETRIEVAL TECHNIQUES

Content-based image retrieval is an active research issue that had been famous from 1990s till present. The main target of CBIR is to get accurate results with lower computational time. This research report discusses on the comparative method used in color histogram based on three major methods used frequently in CBIR which are; normal color histogram using GLCM, color histogram using K-Means, and color histogram using Gabor filtering. A set of 1000 images that cover 6 categories of images from bus, beach, building, flower, horse, and mountain are used to test the accuracy and the precision of each method. Using Euclidean distance, similarity between queried image and the candidate images are calculated. Experiment results shows that color histogram with GLCM method had high accuracy and precise compared to K-Means and Gabor. Future work will be made to add more features that are famous in CBIR which are texture, color, and shape features in order to get better results.