Abstract

Image retrieval is a technique for searching images from database that have similar characteristic with query image. Retrieve image based on text-based is less effective because it's disadvantage is difference of human's perception to represent an image. This problem can be solved by retrieve image based on image's content that called Content Based Image Retrieval (CBIR).

On this final project, developing CBIR based on color and shape feature. Color feature is extracted using Color Moments, which is use the dominant features of the color distributions as color vector, they are mean, standard deviation, and skewness of each color channel. To extracting shape feature, used Moment Invariants method, which is compute seven invariant moments that invariant under scale, translation, and rotation.

Final result shows the parallel combination of similarity computation of Color Moments and Moment Invariants has the accuracy result better than serial combination in spite of without combination. The accuracy of parallel combination for this final project is 84.22%.

Keyword: content based image retrieval, color moments, moment invariants