ABSTRACT

Today's digital imagery has an important role in many fields, such as on education, health, art, government, commerce, health, and crime prevention. Search image become on of the important things that we needed, its because of the increasing amount of image data collection. Currently, there is a search technology that based on the image of the visual content of images called Content Based Image Retrieval (CBIR).

In this Final Paper, CBIR system will be constructed by the method of Wavelet-Based Salient Point Detector. Feature of the image is extracted using Discrete Wavelet Transform Salient Point are then determined from the obtained wavelet subband. Wavelet that used in this system is Haar wavelet. Similarity calculation using Canberra distance. Calculation of performance's system using Mean Average Precision.

System testing is performed to determine the best parameters that can improve the performance of this CBIR system. From the test result, the best performance with Mean Average Precision is 0.387 with parameter level of decomposition in 3 level and the composition of the wavelet subband is dominant in the CD (HH).

Keywords: Wavelet-based Salient Point Detector, Wavelete Discrete Transform, Haar wavelet, Canberra distance, Mean Average Precision