ABSTRACT

The development from analog image to digital image give several advantages, one of them is getting easier in distribution. Digital image can be easily distributed by internet or copy-paste it from one media to others. In this advantage, the new problem about the ownership or the copyrighted of the image has occured.

Because of that, watermarking technique can be developed for identification the ownership of the image. Watermarking is embedding some data to a carrier media in hidden ways, in this case the carrier is the digital image. The problem is to detect the hidden information -watermark information- can only be done by using the same method when embedding the information.

In this final project, analysis and implementation have been done for digital image watermarking detection. This detection system using discrete cosine transform (DCT) and false detection transform (FPR). DCT and DWT are used for getting feature parameter from original image and watermarked image. The result from calculation both of them is the template. Feature parameter of template and the original image are compared by using some strategies. So the ubitary correlation can be got.

The system performance assessment based on detection accuration by looking true positive rate (TPR) and false positive rate (FPR). If TPR value get higher and FPR value get lower so the accuration detection get higher too and otherwise.

Key word : *watermarking*, DCT, DWT, *unitary correlation*, TPR, FPR