

## Abstract

The application of *watermarking* technique on digital data especially image, it mention good if inserted data can't be visible in plain view, carrier image does not feel the decreasing of quality and also the inserted data must hold out with attack.

In this final assignment *watermarking* is implemented on digital image using Arithmetic Coding base on Integer Wavelet Transform(IWT). IWT yielding wavelet coefficient in integer type. *Arithmetic Coding* is used tp compress bitplane so yielding space for embedding watermark.

Insertion of *watermark* at *bitplane* 1-6 yielding good quality of result image with PSNR between 30 and 45dB. Extraction image with attack yielding PSNR better than if the insertion held on *bitplane* 8. Daubechies order of 1-6 yielding better quality of result image and extraction image than others (<30dB).

Keywords : *watermarking, IWT, Arithmetic Coding, extraction, embedding*