

Abstract

Development in Internet Technology make exchange of information can be done fastly and easily. Simplicity in exchange of information especially in digital data make transaction of data content can't be checked perfectly. Anyone can claim that he is the owner of the data digital. Because of that, protection of copyright is needed, and one of them is watermarking technique in digital data.

In this Final Assignment will be implemented watermarking technique especially on digital image using Discrete Cosine Transform (DCT) and Singular Value Decomposition (SVD), the expectation of image watermaking is to get good quality on image watermarking and robust to attacks.

In embedding process, image watermarking have a good quality for scalling factor < 0.1 . The Quality of image watermarking in decomposition level 3 is better than level 2 and level 1. Embedding watermark in low-frequency is robust to Gaussian Blur Attack, rescale, and JPEG Compression, but in high-frequency is robust to Gaussian Noise.

Keywords: *Watermarking, digital image, Discrete Cosine Transform, Singular Value Decomposition*