

ABSTRACT

Image steganography is the process of inserting a secret message or stego message on a digital image but not visible or unknown to the human eye. the unknown stego message caused the need for a technique to find out the existence of a steganographic message in a digital image called steganalysis.

This research analyzes the image steganalysis system based on discrete wavelet transform (DWT) and raw quick pair (RQP) analysis. The result of DWT is a subband that is frequency separated. Furthermore, the subband is calculated to get the RQP value. The RQP value is used for the KNN classification. In this study, the classification of KNN is the original image class and the stego image class. The performance parameters of this study are accuracy and computational time.

The best accuracy parameter for detecting the presence of messages is the best image size is 128×128 The best DWT parameters are the subband HL type, the level of 1, and the haar type mother wavelet. The best KNN parameter is K with a magnitude of 1 and the type of euclidean distance. The best accuracy is 75 The best accuracy parameter for message position detection is the best image size is 128×128 . The best DWT parameters are the subband HL type, the level of 1, and the haar type mother wavelet. The best KNN parameters are K with a size of 1 and a type of cityblock distance. The best accuracy is 69.33

Keywords: Steganalysis, raw quick pair, discrete wavelet transform, DWT, RQP.