ABSTRACT

The exchange of information technology is currently so fast because it greatly facilitates human activity. The current era of information technology has touched various aspects of life including the medical world, one of which is the Electronic health record (EHR). One of the main features of the EHR is that health information can be created and managed by official providers in digital format that can be shared with other providers who are more than one health care organization. Because the EHR can be accessed by more than one health care organization a sign that attaches to health information that cannot be removed and becomes the identity of the sending hospital. In this case the watermarking technique can be used to insert the identity of the sender's pain into the image of the information sent. In this study watermarking will be conducted using the Discrete Sine Transform (DST), Lifting Wavelet Transform (LWT) and Single Value Decomposition (SVD) methods. DST and LWT will process the medical image and merge between the medical image as a host and the watermark image in the SVD process. In certain scenarios, the watermarked image will be given an attack to find out the resilience it produces. The results of this study are a medical image that has been through the process of watermarking using the DST-LWT-SVD method and testing using several types of attacks. The value of the parameters sought is PSNR 54,3953 dB, MSE 0,658, and BER 0.1696.