

VIDEO WATERMARKING – EMBEDDING GRAYSCALE MESSAGES USING SINGULAR VALUE DECOMPOSITION

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ABSTRACT

This Paper describes one of the novel methods to embed grayscale messages in the video. For this we made use of one of the most powerful linear algebra technique namely singular value decomposition. We have also used two popular visual quality matrices viz Peak Signal to Noise Ratio (PSNR) and Mean Square Error (MSE) at the transmitter side so as to test the perceptibility of the video after embedding the message. We found correlation between the actual message and the recovered message at the receiver side so as to test the robustness of the algorithm. We found this method fully robust against attacks which are shown at the result section of the paper.

KEYWORDS: Video Watermarking, Singular Value Decomposition