Abstract

In this final project will be discussed about Steganography based on LSB using particle swarm optimization and chaos method. Steganography is hiding message (wrting covered) technique for embed secret message into image, audio, or video file. Using steganography make our embedding message not easy to traceby human eye because steganography not change the real shape of media that have embed by secret message so we can escape from information stealing. Steganography often using Least Significant Bit (LSB) method but LSB still has weakness which is low security. Therefore to improve the security from steganography we using chaos method to shiffle message bits dan Discrete Wavelet Transformation (DWT) for looking coefficient value and Particle Swarm Optimization for looking best fitness values and optimized it. This kind of research has been done before but using different method.which is genetic algorithm for looking best fitness values. In this final project have implemented LSB technique using chaos methid and PSO algorithm. Result of this final project showing that the used method better than method that used in the previous research from Peak to Signal Noise Radio (PSNR) side.

Result in this final project is value of PSNR from image that embedded with text is 1.9% meanwhile value of PSNR from method before is 0.5%

Keywords: *Steganografi, Particle swarm optimization , LSB , PSNR , Chaos*