ABSTRACT

In the previous research, entitled "Simulation and Digital Image Steganography Analysis Method Using Random Sudoku Puzzles and BCH Code" has done a simulation method used in the Rubik cube encryption process. However, in these studies still have some shortcomings such as the destruction of secret messages. To improve the integrity of the message then conducted research with the principle of a secret message insertion trajectory rubik cube with a convolutional error correction code.

Steganography with Rubik method is a determination technique for stego message position insertion of text messages on the digital image. Rubik shuffling pattern is used as a reference insertion of text messages on the digital image. The insertion process begins with converting the text message into a binary. Then the binary number is inserted one by one into a digital image in accordance with a reference Rubik. The time of extraction, number of digits in the stego-image will be restored to its former condition by reference to the Rubik cube pattern upon delivery thus the message can be read by the recipient. In order to reduce the error at the time of a disturbance, the error correction method is using convolution code.

This final project using steganography method that differs from existing methods are based on the principle of rubik cube and convolution error correction code.The result from steganograhy system have BER value 0 and PSNR value greater than 75dB when there is no attack and still in insertion message capacity .

***Key** : steganography, digital images, rubik's cube*