

ABSTRACT

Security of secret message is becoming an important thing to improve, remember the easiness for everyone to access the network at this time. Because of that, message security that being sent to receiver must be reliable. One of the way for improving the security is using steganography. Steganography is a technique of hiding message from one media to another without being known. A secret message can be text, image, voice or video. The media concealment can also be text, image, voice or video.

This final project is doing system design by using Discrete Cosine Transform and Cellular Automata method. Both of the methods are being combined and used to hide a secret message in the form of text for getting a higher security. In the beginning of the process, the message is being inserted into a cover image, and then the cover image will be encrypted, so the original image of cover image can not be identified.

The result of this final project is a CA image in the form of broken image but still has a secret message in it. The CER value without noise in the blue layer is 0% and in the red and green layer are 7,98% and 25,35%. But, when the image is given noise, the secret message can not be extracted anymore. It can be concluded that this system will work well if the CA image is not given attack.

Keyword : Steganography, 2D Rules, Cellular Automata (CA).