ABSTRACT

NOISE BASED STEGANOGRAPHY-CRYPTOGRAPHY USING ELIPTIC CURVE

Intercepting messages and changing the content of message is one way of fraudulent ways that businesspeople do to beat their competitors. The growing hacking technique makes a message no longer kept secret. In addition, personal data theft is a problem that must be resolved. Cryptography and steganography techniques are one of the solutions to resolve that problem.

This final project discusses cryptographic techniques used to improve the security of a message. The technique used is noise-based cryptography-steganography. This technique is a combination of cryptography and steganography techniques, where a noise will be encrypted and inserted between the lines of messages sent. The alogorithm used is Eliptic Curve Cryptography (ECC) algorithm which is the modified (Modified El-Gamal). This algorithm will also be used in decryption process in the receiver, where the receiver will identify the message of random and big valuable (noise), which is the point beyond the curve of the curve equation that has been defined as the equation of the encryption and decryption process.

With this technique, a noise will look like a normal encrypted message. So, only authorized user knows it. Therefore, the more noise is inserted, then the authorized user‘s decryption time will become fast and the complexity is decreases. While the unauthorized user need more time when decrypting messages and also increasing the complexity. Thus, this final task answer the issues, where the security level of a message will increased and a message will be kept confidential.

Keyword : *Cryptography-Steganography, Eliptic Curve Cryptography, Modified El-Gamal, Noise*