

IMPLEMENTATION OF STEGANOGRAPHY USING THE LEAST SIGNIFICANT BIT AND HUFFMAN METHOD ON TEXT DATA SECURITY

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ABSTRACT

Advances in technology have made sending messages easier, faster and cheaper. We can send messages in the form of text, images, audio, and video. Significant messaging has some people looking for ways to access messages they don't belong to. One way to overcome this is by using the steganography method, where you could say the science or art of hiding messages into a medium so that the existence of the message is not known or realized by people other than the sender of the message and the recipient of the message. In addition, with the addition of cryptography to scramble messages or encrypt them, so these two techniques can be combined to obtain a secret delivery method that is difficult to know. In this study apply the Huffman algorithm as cryptography to encrypt messages and the Least Significant Bit (LSB) method as steganography for inserting messages into images. The results of the calculation of the Huffman algorithm and the Least Significant Bit method of the first, second, and third tests are that the image capacity used for the steganography process will increase the capacity of the original image, but the change in capacity is not affected by the capacity of the inserted text, but rather that affects the change in image capacity. is the resolution of the image. Using Huffman code can compress text data about 50% more than using ASCII code. Also Huffman code is simpler than ASCII code.

Keywords: *Huffman, Least Significant Bit, Cryptography, Steganography.*