IMPLEMENTATION OF STEGANOGRAPHY ON DIGITAL IMAGES USING THE LEAST SIGNIFICANT BIT (LSB) METHOD

NANDA CHIKO BINTANG APRIANSYAH
Informatics Study Program, Faculty of Science and Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
Email: chikoedan@gmail.com

ABSTRACT

In the modern era characterized by increasingly extensive and rapidly developing information exchange, data security and information privacy issues have become a major concern in the digital world. With the steganography method, secret messages can be hidden in digital images without arousing suspicion. One of the most common techniques is the Least Significant Bit (LSB) method. This research aims to investigate the extent to which the LSB method is effective in inserting secret messages without disturbing the original image. The research results show that secret messages can be inserted and extracted. The insertion results produce an average PSNR value of 82,660 and an average MSE of 0.001. This shows that the original image as a message storage medium does not change the stego image significantly or has almost no visible differences.

Keywords: Digital Image, LSB, Steganography, Data Security, Embedding and Extracting