

## **SECURED STEGANOGRAPHY APPROACH USING AES**

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### **ABSTRACT**

Today's cyber world is growing rapidly over Internet technologies & its applications needing high level of safeguard for expensive data during transmission over the open communication channel. Image steganography is a technique for hiding information into a cover image. Least Significant-Bit (LSB) replacement based method is most common steganographic technique in spatial domain owing to its simplicity and hiding capacity. Most of existing approaches focus on the embedding strategy with less consideration to the pre-processing such as encryption of secret image. The conventional steganography algorithm does not provide the preprocessing required in image for better security and privacy. The proposed work presents an exclusive technique for Image steganography based on the Advance Encryption Standard (AES) using 128 bit block size of plaintext & 128 bits of Secret key. The preprocessing provide high level of security as extraction of image is not possible without the knowledge of mapping rules of AES and secret key .

**KEYWORDS:** Steganography, AES, S-Box, LSB Technique, Cryptography, Preprocessing of Secret Image