Abstract

Security has virtually become an indispensable non-functional requirement for any technology that deals with data. Traditional methods of imparting security using encryption have given away themselves long ago to cryptanalytic ventures. A different method of secure data transfer without revealing the mere existence of secret, called Steganography is a promising technique to ensure security. This technique camouflages secret data into a casual cover image, without affecting its visually perceived quality. This paper proposes a novel technique, which is a hybrid of cryptography, edge detection and steganography. By differentially embedding secret data into edges and smooth pixels of cover image, so that edge pixels and smooth pixels have data with different encryptions, the cryptic effect can be boosted to a greater limit, making the
Unauthorized extraction of secret data impossible.

Reference


Index Terms

Computer Science
Algorithms

Key words

Edge Detection
Information hiding
Least Significant Bit
( LSB) Embedding

Optimal Pixel Adjustment Process (OPAP)