International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations
IASET

UNLIMITED SIZE OF ENGLISH PLAIN TEXT-IN-TEXT HIDING ALGORITHM

MOHAMMED JAWAR KHAMI

Assistant Professor, Department of Computer Science, Basra Technical Institute,

Southern Technical University, Iraq

ABSRACT

When using internet as main communication infrastructure, people apart need their information to be protected from other third parties. Two widely techniques are used for it, cryptography and steganography. In cryptography the existence of the encrypted message is visible to the world. While steganography conceals the very existence of the message.

This paper concerns with steganography. It deals with text-in-text data hiding technique. The method of using non-printable characters of the Unicode standard characters are chosen to encode and hide English text into another English cover text to produce a stego text that can be used later, at the other end of the communication media, to extract and recover the exact secret text.

Two text-in-text and text-from-text hiding and extraction algorithms are written and coded in matlab programming language. Merits and drawbacks are shown for the proposed algorithms. The designed algorithms result in adding many enhancements to the implementation of the basic method of using the non-printable characters of the Unicode standard characters to text-in-text hiding technique. These enhancements include the size minimization of stego text file, reducing of hiding and extraction processing time and thus reducing communication time. From security point of view, key has been used to encrypt the secret text before hiding it and decrypt the text at the extraction stage.

KEYWORDS: Steganography, Text Steganograpy, Encryption, Data Hiding Algorithms