



Methods of Statistics Deception Using Phyton

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ABSTRACT:

Statistics deception is the artwork and technological know-how of writing hidden messages in this kind of manner that no one, aside from the sender and meant recipient, suspects the life of the message. Statistics deception, in general, is based at the imperfection of the human auditory and visible systems. Many exclusive service record codecs may be used, however virtual pictures are the maximum famous due to their frequency at the internet. For hiding mystery records in pictures, there exists a huge style of Statistics deception strategies a few are extra complicated than others and they all have respective robust and vulnerable points. Different packages can also additionally require absolute invisibility of the name of the game records, even as others require a huge mystery message to be hidden. This assignment document intends to present a top level view of picture Statistics deception, its makes use of and strategies. It additionally tries to pick out the necessities of a great Statistics deception set of rules and in brief displays on which stenographic strategies are extra appropriate for which packages. Statistics deception is the exercise of hiding personal or touchy records inside some thing that looks to be not anything out to the usual. Statistics deception is frequently harassed with cryptology due to the fact the 2 are comparable withinside the manner that they each are used to shield essential records. The distinction among is that steganography entails hiding records so it seems that no records is hidden at all. If someone or people perspectives the item that the records is hidden inner of he or she can be able to don't have any concept that there may be any hidden records, consequently the character will now no longer try and decrypt the records. What Statistics deception basically does is make the most human perception, human senses aren't educated to search for documents which have records inner of them, despite the fact that this software program is to be had which could do what's referred to as Steganography. The maximum not unusualplace use of Statistics deception is to cover a record inner any other record.

Keywords: Statistics deception, algorithm, Statistics deception technique, steganography.

INTRODUCTION

One of the motives that intruders may also achieve success is that the most of the data they accumulate from a device is for the duration of a shape that they will examine and comprehend. Intruders might also additionally monitor the data to others, alter it to misrepresent a non-public or organization, or use it to release an attack. One method to the prevailing hassle is, thru the employment of Method of Statistics Deception. Method of Statistics Deception can be a way of hiding statistics in virtual media. In assessment to cryptography, it is to now no longer maintain others from understanding the hidden statistics however it is to stay others from questioning that the understanding even exists. Method of Statistics Deception grow to be extra critical as extra human beings be part of the our on-line world revolution. Method of Statistics Deception is that the artwork of concealing statistics in methods for the duration of which prevents the detection of hidden messages. Method of Statistics Deception consist of an array of mystery communicate techniques that cover the message from being visible or discovered. because of advances in Information and engineering (ICT), maximum of understanding is stored electronically. Consequently, the safety of statistics has grow to be a essential issue. Besides cryptography, Method of Statistics Deception are going to be hired to steady statistics. In cryptography, the message or encrypted message is embedded in an incredibly virtual host earlier than passing it thru the network, consequently the life of the message is unknown. Besides hiding information for confidentiality, this technique of statistics hiding may also be prolonged to copyright safety for virtual media: audio, video and pictures.

PROBLEM STATEMENT

The former consists of linguistic or language varieties of hidden writing. The later, like invisible ink, try of hide messages physically. One disadvantage of linguistic Method of Statistics Deception is that users must equip themselves to own an honest knowledge of linguist. In recent years, everything is trending toward digitization. And with the event of the net technology, digital media are often transmitted conveniently over the network. Therefore, messages may be secretly carried by digital media by using the tactic of Statistics Deception techniques, so be transmitted through the web rapidly Method of Statistics Deception is that the art of hiding the very fact that communication is going down, by hiding information in other information.

many various carrier file formats are often used, but digital images are the foremost popular due to their frequency on the web. For hiding secret information in images, there exists an oversized sort of Method of Statistics Deception techniques some are more complex than others and every one of them have respective strong and weak points.

OBJECTIVES

- To product security tool based on Method of Statistics Deception techniques.
- To explore techniques of hiding data using encryption module of this project
- To extract techniques of getting secret data using decryption module

II SOFTWARE SPECIFICATION

SOFTWARE REQUIREMENTS

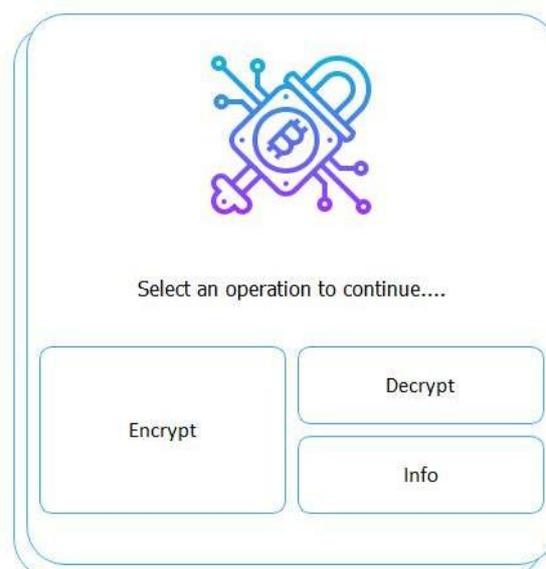
- Tool : Python IDE Python
- Modules : pycryptodome, AES, PyQt5
- Design Environment : PyQt Designer

PROPOSED METHOD

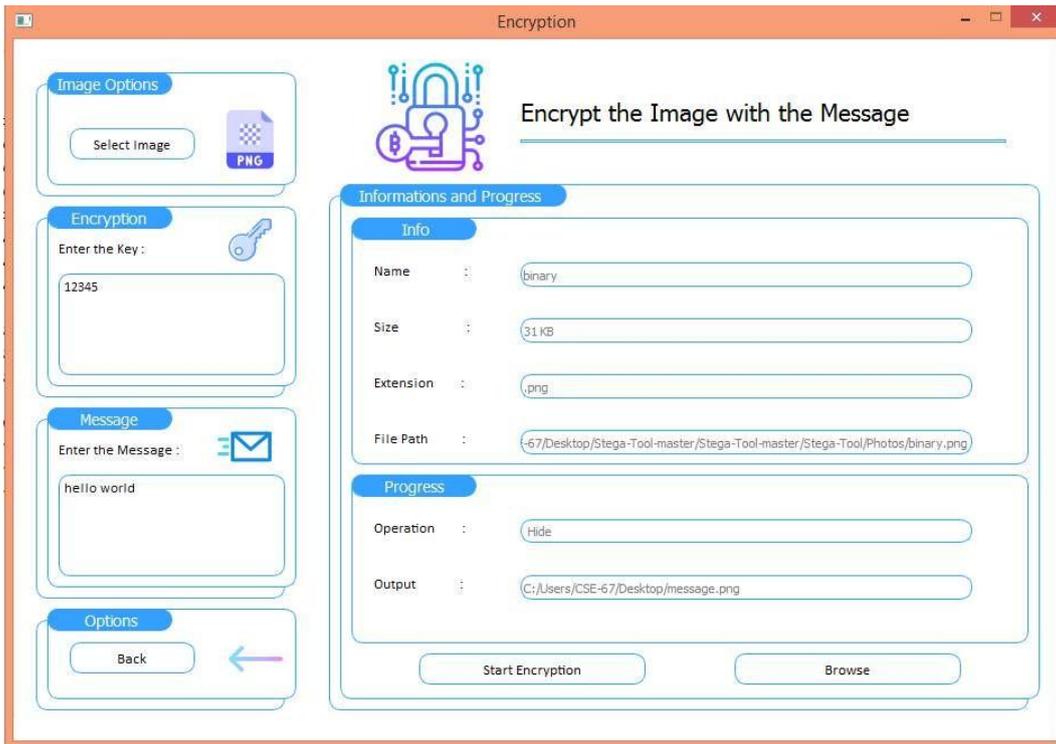
the proposed method should provide better security when transmitting or transferring the info or messages from one end to a different . The main objective of the project is to hide the message or a secret data into a picture which further act as a carrier of secret data and to transmit to the destination securely with none modification. If there are any perceivable changes when we are inserting or embedding the information into the image or if any distortions occur in the image or on its resolution there could also be an opportunity for an unauthorized person to switch the info . So, the data encryption into an image and decryption and Method of Statistics Deception plays a major role in the project. The three important sections in the project are: 1. Encryption: In this section for encryption, I have used LSB (Least Significant bit) algorithm which helped me to build a steganography application to provide better security. The LSB algorithm provides better security compared to JSTEG algorithm with improved data compression and data hiding capacities. 2. Method of Statistics Deception: I have used the image as carrier for transmission of data and by using the “Least Significant Bit Algorithm” I have inserted the message bits in to the least significant pixels of an image. 3. Decryption: The decryption process is analogous but opposite to the encryption process. When the receiver wants to decrypt the data from the image, it uses same “Least Significant Bit Algorithm” for extracting the data from the image by taking password or key as reference. System Architecture

RESULTS

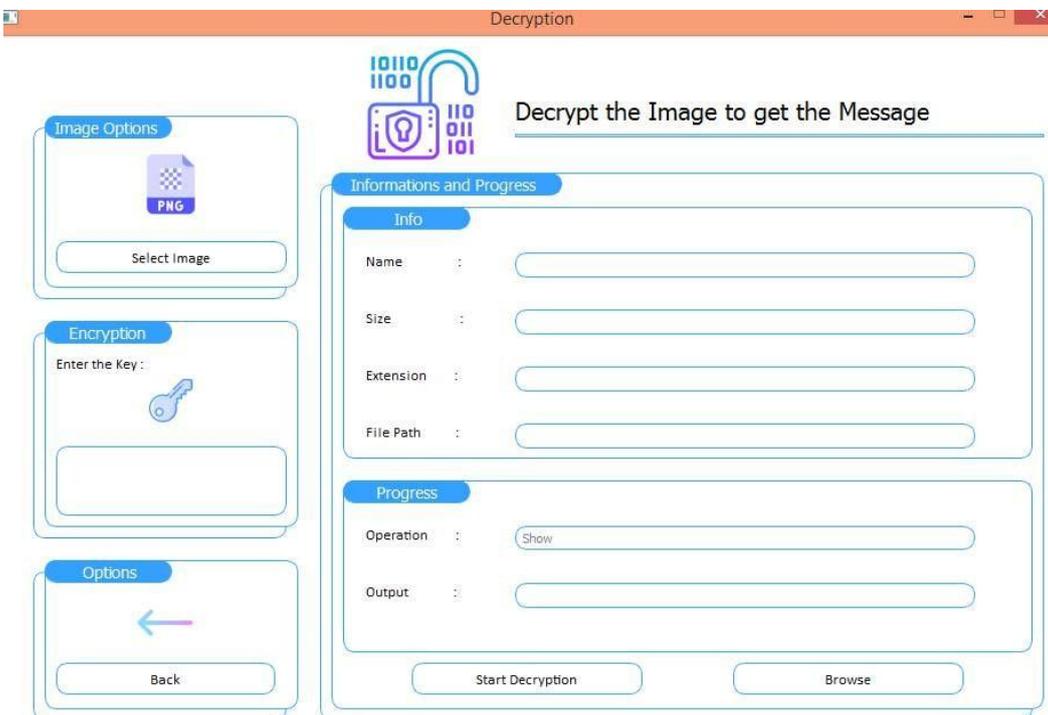
Main Screen :



Encrypt Screen :



Decrypt Screen :



CONCLUSION

Several methods for hiding data in, images were described, with appropriate introductions to the environments of every medium, also because the strengths and weaknesses of every method. The key algorithm for designing the strategy of Statistics Deception system has been dealt. Most data-hiding systems make the most of human perceptual weaknesses, but have weaknesses of their own. We conclude that for now, it seems that no system of data-hiding is completely resistant to attack. However, Method of Statistics Deception has its place in security. Though it cannot replace cryptography totally, it's intended to supplement it. Its application in watermarking and fingerprinting, to be used in detection of unauthorized, illegally copied material, is continually being realized and developed. Also, in places where standard cryptography and encryption is outlawed, Method of Statistics Deception are often used for covert data transmission. Method of Statistics Deception is used together with cryptography to create a highly secure data high way. Formerly just an interest of the military, Method of Statistics Deception is now gaining popularity among the masses. Soon, any human are going to be ready to put his own watermark on his artistic creations...

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