

SECURED FILE TRANSMISSION USING CRYPTOGRAPHIC AND STEGANOGRAPHIC TECHNIQUES

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ABSTRACT

The evolution of computer technology has led to the rapid development of data communications. In turn, this has resulted in greater importance on security of data transmission. Demand for reliable and efficient data transmission is increasing and being focused on. Thus, secure file transmission becomes vital and essential in data operations nowadays.

The overall project is separated into two stages. The first stage is on the subject of cryptography which encrypts the data using a particular algorithm. Steganography is the next stage of this project, and involves the embedding of the encrypted data from stage one. By implementing both cryptography and steganography, the encrypted data via cryptographic encryption algorithms is embedded into an image file. The embedded encrypted data in an image is often difficult to be detected because the data is not a valid understandable data. Hence, this produces a stronger security with double layer protection which is hard to be deciphered or even detected.

All of the objectives and aims of the project have been achieved. In addition, further accomplishments such as implementation of addition encryption algorithms and Graphical User Interface (GUI) were made.