

## NEW RULES BASED APPROACH FOR ARABIC TEXT DATA HIDING

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### ABSTRACT

In steganography, there are many hiding techniques to do the job of data hiding. These techniques differ from each other either by the applied hiding approach or by the used cover object. From the cover object side view, and even though text documents are unavoidable form of information communication among humans, researches on text hiding techniques are less in contrast to other cover object's techniques. This is due to that text documents have relatively less number of features that can be used to hide data in comparison with other cover object types. In this paper, new text hiding approach is proposed, written in algorithms form, and then coded in mat lab (m-files). Text hiding technique used in this work has many advantages over other existing text-in-text hiding techniques. These advantages include the usage of Arabic or Arabic-English mixed cover text with the aids of two of the non-printing Unicode characters. Also applying new hiding rules concerning Arabic writing system. The cover text classified into groups of Arabic letters each with specific features and thus hiding text in between letters from these groups must controlled by these new text hiding rules. Mat lab programs for embedding and extracting the secret text, according to the new approach, are tested and the outputs have been found very satisfying. Both secret and cover text have the same original format and text configuration.

**KEYWORDS:** Cryptography, Embedding and Extraction Algorithms, Huffman Code System, Unicode Characters Set