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Improving Security and Capacity for Arabic Text Steganography Using 'Kashida' Extensions

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***Abstract*—** Steganography is a method of hiding data within a cover media so that other individuals fail to realize their existence. In this paper, a new approach for steganography in Arabic texts is proposed. The main idea is that each Arabic word may have some characters which can be extended by 'Kashida'. The ranks 'locations' of such characters and the inserted Kashida, construct a coding method to represent a block of secret bits. Different scenarios have been proposed based on the maximum number of Kashida possible to be inserted per word. The approach was compared to some existing Arabic text steganography approaches in terms of capacity and security. It is shown that this proposed approach outperforms the others with interesting promising results.

Keywords: Arabic text, Cryptography, Feature coding, Information security, Steganography, Text watermarking.