Abstract

Extensive use of digital media like text, image, audio, and video on the Internet generated a requirement for providing traffic security. For carrying out confidential communication over public networks, it was found that simply concealing the contents of a message using cryptography was not adequate. In this study, the new procedure in steganography is developed by using the diacritics-Harakat- of Arabic language as a covered medium to hide the Chinese stroke text. So that in the Arabic language, the diacritics-Harakat- which are used to represent vowel sounds are not useful when writing and sending the documents because the receiver can clearly understand the text without needing the Harakat. The proposed approach uses eight different diacritical symbols in Arabic to hide binary bits in the original cover media. The embedded data are then extracted by reading diacritics from the document and translating them back to binary. Two diacritics are used to hide one Unicode character for strengthen the power
of the security. The dictionary of English-Chinese and Chinese-English are stored in both sides. Finally the diacritics are saved in the covered media so that the receiver can use it for getting the original message.

Reference


Index Terms

Computer Science Information Security

Key words

Arabic language diacritics Stroke in Chinese language text file format

Unicode