Adaptive Steganography scheme based on LDPC codes

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Abstract—Steganography is the art of secret communication. Since the advent of modern steganography, in the 2000s, many approaches based on the error correcting codes (Hamming, BCH, RS, STC ...) have been proposed to reduce the number of changes of the cover medium while inserting the maximum bits. The works of I.Diop and al[1], inspired by those of T.Filler[2] have shown that the LDPC codes are good candidates in minimizing the impact of insertion. This work is a continuation of the use of LDPC codes in steganography. We propose in this paper a steganography scheme based on these codes inspired by the adaptive approach relating to the detectability of the map. We evaluate the performance of our method by applying an algorithm for steganalysis.

Keywords—Adaptative steganography, complexity, detectability, steganalysis.

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