Abstract

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Increasing The Embedding Capacity of List Steganography Based on Syllable Patterns Using Multicolumn and Bigram Mapping

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List-based steganography or Listega is a steganogrraphic method based on Noiseless Seganography paradigm, or Nostega. Listega based on syllable pattern. The basic concept of Listega is embedding names which have the corresponding syllable pattern. The output of this system is a stego. The problem of listega using one column is that the embedding capacity is less than 500 characters. It is occurred, because of David method's only uses one column of each row to embed one character. To increase the embedding capacity, Listega based on syllable pattern using two column is proposed. The basic concept of the proposed method is embedding secret messages in Indonesian language based on Unigram and Bigram. In this case, list of elementary school students list are used. This kind of list-cover will not raising suspicion, because it uses legitimate items. According the results of the experiments, it is shown that the proposed method has higher embedding capacity than David's method.

Keywords : Listega, Noiseless, steganography, syllable patterns, Unigram, Bigram.