Abstract

Many researchers have studied reversible data hiding techniques in recent years and most have proposed reversible data hiding schemes that guarantees only that the original cover image can be reconstructed completely. Once the secret data are embedded in the compression domain and the receiver wants to store the cover image in a compression mode to save storage space, the receiver must extract the secret data, reconstruct the cover image, and compress the cover image again to generate compression codes. In this paper, we propose a novel data hiding method based on VQ compressed images. Codebooks of secret message & cover images are combined using shuffle algorithm. Experimental results indicate that our proposed scheme provides 100% hiding capacity or more that means secret message can be of same or more size than cover image and better image quality compared with existing schemes based on VQ compressed images. The technique is robust against stegaanalysis technique.
Reference


Mixing Codebooks of LBG, KPE and KFCG Algorithms to Increase Capacity of Information Hiding

64-71, 2009.


Index Terms

Computer Science  Security

Key words

Reversible Data hiding
VQ

LBG
KPE
KFCG