Abstract

Generally, Embedding of needful information in a host signal without any loss of host information is required for copyrights protection. Customer identification can be embedded directly into multimedia files, this guide to a number of definite requirements with respect to robustness, simplicity and complexity. In early stages, data hiding can be processed based on vector quantization (VQ) compressed code. Most of this method just hides data into the VQ compressed code, other than not dealing with the quality of VQ decompressed image. Furthermore, if the hiding method is irreversible then the quality of VQ decompressed image shall be not as good as PSNR values and mapping vectors from a vector space to a finite number of regions in that space need more time to search regions. To overcome these
problems, vector quantization in data hiding schema proposed a K-Means Multi-Objective Genetic Algorithm (KMOGA) with vector quantization methods. In this proposed approach, a finite number of regions results are found from K-Means multi-objective genetic algorithm and vector quantization technique which can split and compress the data into smaller groups and are embedded into the multimedia pixels. This KMOGA-VQ method enables for effective pixel utilization and retrieves the content without any loss of original pixels. This kind of KMOGA-VQ is based on indices, whereas, the data content can be mapped into many to one form than VQ methods.

References


**Index Terms**

Computer Science  
Data Mining

**Keywords**

Data Hiding  
Stenography  
Water Marking  
Vector Quantization  
Copyright Protections.