Abstract

In this paper, we propose an improved region-based image retrieval system. The system applies image segmentation to divide an image into discrete regions, which helps to correspond to objects. The main discussion of this paper is to compute the signature of an input image at the browser and sends this signature to the database to retrieve the similar images with set of URLs. The signature of web images is stored in the database in the each object to indexing and retrieval performance and also to provide a better similarity distance
computation. In addition, similarities distance computation we introduced object weight based on object’s uniqueness. Therefore, objects that are not unique such as trees and skies will have less weight. The experimental evaluation is based on the IRM and Geometric Histogram and the performance is compared between them. As compared with existing technique and systems, such as IRM and Geometric Histogram, our study demonstrate the following unique advantages: (i) an improvement in image segmentation accuracy using the modified k-means algorithm (ii) an improvement in retrieval accuracy as a result of a better similarity distance computation that considers the importance and uniqueness of objects in an image.

Reference

Web Image Retrieval using Clustering Approaches


**Index Terms**

Computer Science          Wireless

**Key words**

Region based image retrieval

hierarchical clustering

image classification

image segmentation

region matching