Abstract

In this paper, the performance of various distances in image retrieval and image classification is evaluated based on color and texture features. The evaluation has been done in two classification: k-nearest neighbors and support vector machine (SVM). Given SVM classification is a learning system and any learning system is susceptible to error, therefore in this study a method is proposed for the user interaction. In this method if an error occurs in the first implementation of SVM classification or an image is displayed incorrectly, the next executions show similar images or to inform the user that the image is not in the database. The results of the experiment will be presented and investigated based on color histogram, color moment, color correlogram, gabor features, local binary pattern and wavelet transform in a database.

References


**Index Terms**

Computer Science  
Image Processing

**Keywords**

content-based image retrieval  
color feature  
texture feature  
support vector machine  
k-nearest neighbors.