Abstract

In fields such as medical, art galleries, museums, archaeology, medical imaging, trademark databases, criminal investigations, images especially the digital images grow in quantities of thousands and sometimes even lakhs every year. Content based image retrieval is required from such large databases. This paper compares various CBIR techniques based on difference in generating feature vectors in the transform as well as the non-transform domain. Euclidean Distance is used for the purpose of similarity measure. Four performance evaluation parameters namely, precision, recall, LIRS and LSRR are used.

References


Index Terms

Computer Science

Information Sciences

Keywords

Content Based Image Retrieval (CBIR)  Discrete Cosine Transform (DCT)  Discrete Sine Transform (DST)
Walsh Transform
Row Mean (RM)
Column Mean (CM)
Row Column Mean (RCM)
Forward Diagonal Mean (FDM)
Backward Diagonal Mean (BDM)
Forward Backward Diagonal Mean (FBDM)
Fractional Coefficients
Kekre Transform
Euclidean distance
Precision
Recall
Length of Initial Relevant String of images (LIRS)
Length of String required to Recover the Relevant images (LSRR)