Abstract

In this paper, HSV based color motif co-occurrence matrix (HSV-Motif) is proposed for content based image retrieval (CBIR). The HSV-Motif is proposed in contrast to the RGB based color motif co-occurrence matrix (RGB-Motif). First the RGB (red, green, and blue) image is converted into HSV (hue, saturation, and value) image, then the H and S images are used for histogram calculation by quantizing into Q levels and the local region of V (value) image is represented by seven motif, which are evaluated by taking into consideration of local difference between the pixels. Motif extracts the information based on distribution of edges in an image. Two experiments have been carried out for proving the worth of our algorithm. It is further mentioned that the database considered for experiments are Corel 1000 database (DB1), and MIT VisTex database (DB2). The results after being investigated show a significant improvement in terms of their evaluation measures as compared to RGB-Motif.

References


Subrahmanyam Murala, R. P. Maheshwari, R. Balasubramanian, A Correlogram
HSV Color Motif Co-Occurrence Matrix for Content based Image Retrieval

Algorithm for Image Indexing and Retrieval Using Wavelet and Rotated Wavelet Filters, Int. J. Signal and Imaging Systems Engineering.


Index Terms

Computer Science

Pattern Recognition
Keywords
Color  Texture  Feature Extraction  Local Binary Patterns  Image Retrieval