**Multi-Feature Fusion Image Retrieval Algorithm based on Fuzzy Color**

**ABSTRACT**

How to improve the accuracy of content-based image retrieval algorithms, the key lies in feature extraction. Because the performance of single feature retrieval is poor, feature fusion is performed using multiple features of the image. First, the image is partitioned by rectangle, then the color feature and texture feature are extracted by fuzzy quantization HSV color space and edge directional descriptors. In addition the Hu moments are used to extract the shape features of the image and finally the three kinds of image underlying features are weighted and combined in series. Search, Experiments show that the multi-feature fusion algorithm based on fuzzy color can better describe the image features and improve the retrieval efficiency.

***Keywords-*** image retrieval; rectangular block; fuzzy quantization; edge directional descriptors; Hu moments