

70. Content-Based Image Retrieval Using Correlograms on an Image Segmented by the Complexity

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With the rapid proliferation of the internet and the world-wide-web, the amount of digital image data accessible to users has grown enormously. There is a growing need for effective and efficient image retrieval systems, because image databases are larger in size and more widespread in use. For effective and efficient image retrieval systems, there has been studied on extracting features from images automatically.

This paper presents a new method for an image retrieval using correlograms, which are computed from the image segmented into two parts; the complex part and the plain part. The segmentation is used by the complexity. Our experiments show that the performance of the proposed method is better as compared with that of the original correlogram method with the smaller size of features, because the correlograms of a segmented image represent an image more detail.

od and Hiroshi Murase, "Focused Color Intersection with Efficient Searching for Object Extraction,"

71. Image Segmentation Based on the Fuzzy Clustering Algorithm using Average Intracluster Distance

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Image segmentation is one of the important processes in the image information extraction for computer vision systems. The fuzzy clustering methods have been extensively used in the image segmentation because it extract feature information of the region. Most of fuzzy clustering methods have used the Fuzzy C-means(FCM) algorithm. This algorithm can be misclassified about the different size of cluster because the degree of membership depends on highly the distance between data and the centroid of the clusters.

This paper proposes a fuzzy clustering algorithm using the Average Intracluster Distance that classifies data uniformly without regard to the size of data sets. The Average Intracluster Distance take an average of the vector set belong to each cluster and increase in exact proportion to it's size and density. The experimental results demonstrate that the proposed approach has the good classification entropy and validity function.