

## A Technique for Image Segmentation Using K-Means Clustering Classification

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**Abstract :** The paper presents the Technique for Image Segmentation Using K-Means Clustering Classification. The presented algorithms were specific, however, missed the neighboring information and required high-speed computerized machines to run the segmentation algorithms. Clustering is the process of partitioning a group of data points into a small number of clusters. The proposed method is content-aware and feature extraction method which is able to run on low-end computerized machines, simple algorithm, required low-quality streaming, efficient and used for security purpose. It has the capability to highlight the boundary and the object. At first, the user enters the data in the representation of the input. Then in the next step, the digital image is converted into groups clusters. Clusters are divided into many regions. The same categories with same features of clusters are assembled within a group and different clusters are placed in other groups. Finally, the clusters are combined with respect to similar features and then represented in the form of segments. The clustered image depicts the clear representation of the digital image in order to highlight the regions and boundaries of the image. At last, the final image is presented in the form of segments. All colors of the image are separated in clusters.

**Keywords :** clustering, image segmentation, K-means function, local and global minimum, region

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