

Images segmentation using K-means algorithm

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Image segmentation is the classification of an image into different groups. Many researches have been done in the area of image segmentation using clustering. Each of the pixels in a region are similar with respect to some characteristic or computed property, such as color, intensity, or texture. There are different methods and one of the most popular methods is k-means clustering algorithm. K-means clustering algorithm is an unsupervised algorithm and it is used to segment the interest area from the background. The result of image segmentation is a set of segments that collectively cover the entire image, or a set of contours extracted from the image. Hence we build a program that uses k-means algorithm to segment an image into a number of regions according to the value of the number that will be admitted to the program (k) that specifies the number of clustering areas in the input image.