Eray Tufan

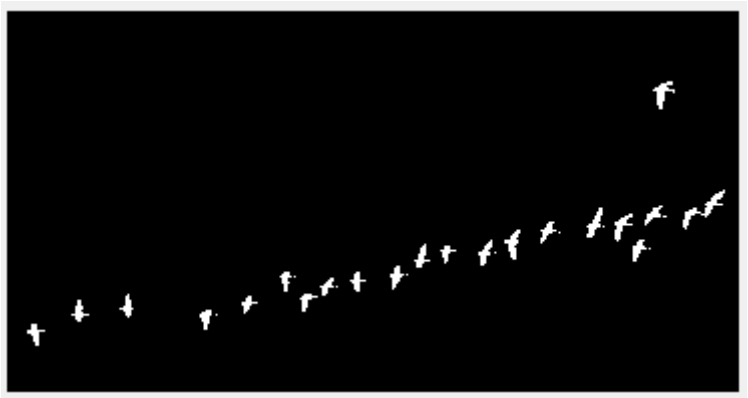
150120204

Report

In the beginning I used threshold value to turn my image to binary image.

Şekil 1-Threshold:120 Image 1

Şekil 2-Threshold: 200 Image 2



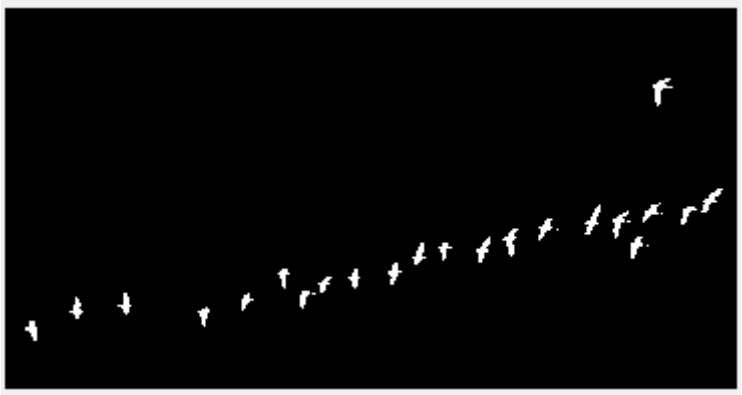
Şekil 3-threshold:150 image 3

After I created thresholded images, I wrote the k-means cluster to find the threshold value by algorithm. I wrote the algorithm which was on the slides and, when it finds the same threshold value after 2 iterations it finishes the loop. There are regian background and region foregrunds which were seperated by the threshold. We get the mean of these regions and sum up the 2 mean values. Then

we divide the value by 2 so with every iterations we find the threshold value. The threshold values and values which were found by the k-means clusters is on the figures.

Şekil 4-threshold:98.5508 Image 1 with k-means cluster

*Şekil 5-**threshold:154.6822 Image 2 in k-means cluster***



Şekil 6-threshold:128.3169 image 3 in k-means cluster

After I created k-means cluster images I wrote label and connectedcomponents algorithms to find and label connected components. It was supposed to work like bwlabel in matlab and label foreground images which were connected to each other with 4 neighbors or 8 neighbors. Unfortunately the algorithm goes to the infinite loop and cannot count the components so it cannot count the birds in the image.