CSE 344: Computer Vision

Homework 2 ; Arka Sarkar 2018222

Algorithm Design

The image is first converted into a binary image, then otsu is applied to this image and the threshold is computed.
We used 2 assumptions to select the foreground and background :

        1) Object will be present at the center of the image.
        2) Boundary pixels are likely to be the background.
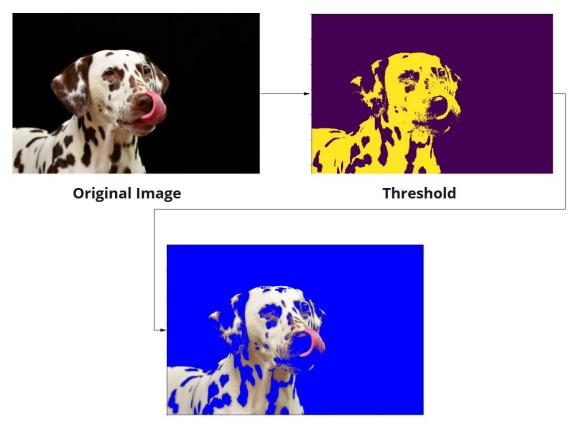
After thresholding the binary image.

Assumption 1

The assumption that the object is at the centre of the image, I selected the centre 15% pixels and calculated the majority of the pixels and that is selected as the foreground.

Assumption 2

The 10 border pixels are scanned and I calculated the majority of pixels and that is selected as the background.

Input and Output

Original Image

Threshold

Otsu Applied (Foregound and Backgound)