# Image Cropping via Semantic Segmentation

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## The image segmentation algorithm

Given: the original image given with the 2d array , the width and height of the original image

Output: segmentation mask

## The image cropping algorithm

Given: segmentation mask , the aspect ratio of the desired cropped image , the original image given with the 2D array , the width and height of the original image.

Output: Cropped image , the width and the height of the cropped image

Center of mass

*- aspect ratio*

Algorithm for finding the width and the height of the cropped image

Pseudocode of the algorithm shown below:

case 1)

we set

if and then:

return

elif and then:

return

elif and then:

elif and then:

case 2)

we set