I started by making a class map with distinct colors for each class. The pre-trained FCN_resnet_50 model was fed the supplied photos. It returned the segmented image. The class map was then used to color the segmented image, using a distinct color for each class. The model's output was then iterated over a further 21 times to produce the feature maps. The feature maps were recorded in a list, which was then shown as a tiled grid. You can see what is happening inside the model and where the segmentation is headed from the feature map. If you look closely at the feature map, you'll see that in many photographs the segments are white while the background is dark. You may discover photographs with all the segments white on the feature map, followed by images with just one segment white. This indicates that the model identified and marked that section.

The segmented pictures utilized and their characteristics are as follows:

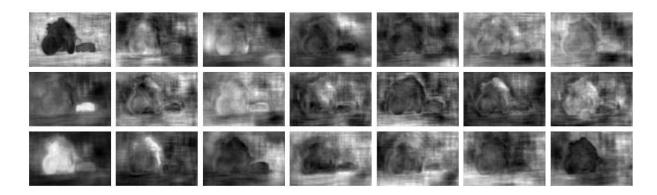
1:

Original Image



Segmented Image





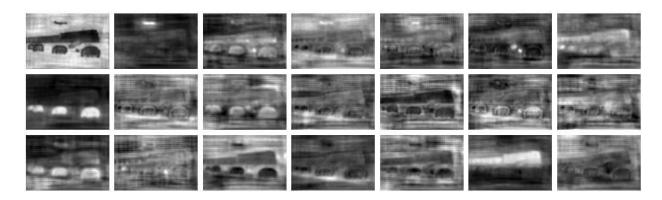
2:

Original Image



Segmented Image

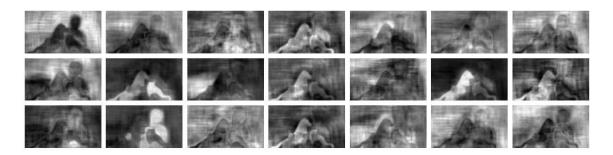






Segmented Image





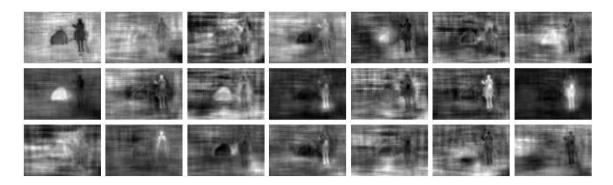
4:



Segmented Image



Feature Map



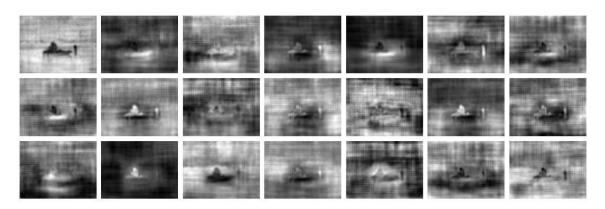
5:



Segmented Image



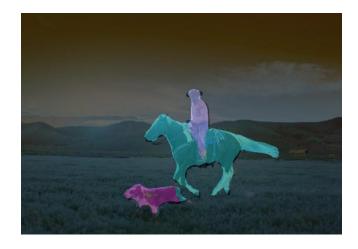
Feature Map

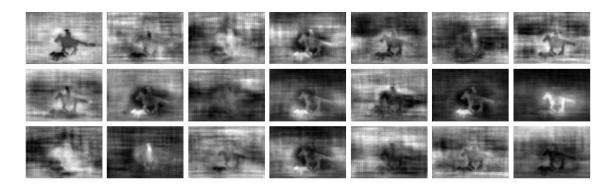


6:



Segmented Image





7:

Original Image



Segmented Image



