Assignments due on 17/03/2020

1. Take the best architecture of your own CNN (also Batch normalization, Dropouts) from assignment 3 that shows highest performance on MNIST fashion.
2. Discard the dense layers from the last stages.
3. Add Deconv/tenspose convolution layer as discussed as FCN – 8 paper.
4. Upsample the last layer in a way that you can add the upsampled output with its previous layer’s output such as FCN – 8.
5. Then repeat the process as FCN -8 does.
6. In the final output, you will get the segmentation output with same dimension of input image.
7. Download training images and ground truths (segmentation ground truth) from Piazza page.
8. In the last of the model, you need to use softmax for each of the pixel to get the class label. In this case: class label would be 0,1,2, ….L-1. Where L is the class labels of the segmentation.
9. This is called Indexed image. So, when you provide the ground truth of segmented image, you need to convert colored image data to indexed image so that you can use the indexed image in the loss function.
10. Train your segmentation network.
11. Test with remaining 30% images. Calculate pixel accuracy, mean Intersection over Union.