CS 6476 Project 6

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Parts 4 & 5: mIoU of different models

Add each of the following (keeping the changes as you move to the next row):

	Training mIoU	Validation mIoU
Simple Segmentation Net (no pretrained weights)	0.3992	0.2220
+ ImageNet-Pretrained backbone	0.5101	0.4965
+ Data augmentation	0.5447	0.4047
ImageNet-Pretrained PSPNet w/ Data Aug. without PPM	0.4731	0.4529
+ PSPNet with PPM		
+ PSPNet with auxiliary loss	0.6228	0.6304

Parts 4 & 5: Per class IoUs

Report your model's IoU for the 11 Camvid classes (you can find the order they are listed in at dataset_lists/camvid-11/camvid-11_names.txt):

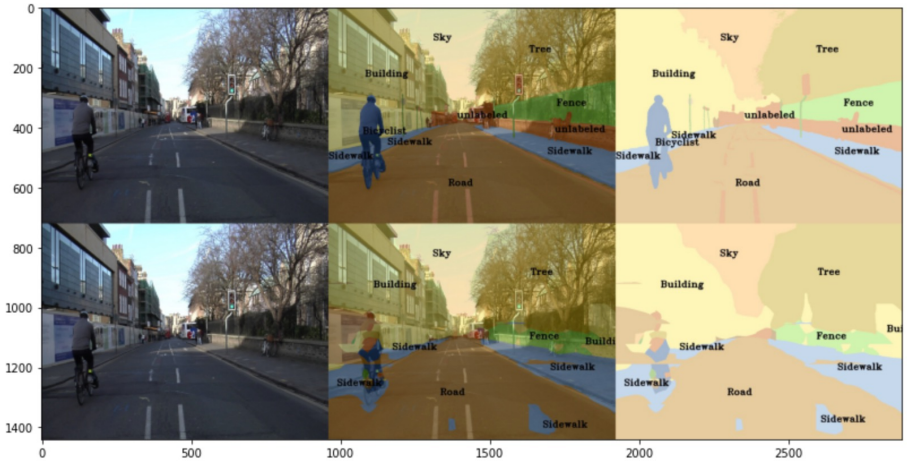
Class Index	Class name	Simple Segmentation Net Class IoU	PSPNet Class IoU
0	Building	0.8148	0.8971
1	Tree	0.8530	0.9077
2	Sky	0.9219	0.9167
3	Car	0.7059	0.7926
4	SignSymbol	0.0000	0.0000
5	Road	0.8242	0.9489
6	Pedestrian	0.1685	0.3352
7	Fence	0.2041	0.7513
8	Column_Pole	0.0042	0.0061
9	Sidewalk	0.5607	0.8340
10	Bicyclist	0.4047	0.5444

Parts 4 & 5: Most difficult classes

[Which classes have the lowest mIoU? Why might they be the most difficult? Provide an example RGB image from Camvid that illustrates your point]
SignSymbol and Column_Pole class has the lowest mIoU. Since both sign symbol and column poles are very thin and small. Especially our data has been down sampled and we have used dilation convolution.

Part 4: Simple segmentation net qualitative results

[Paste a figure of the generated semantic segmentation from Colab. It should be a 2x3 grid, with ground truth on the top row, and your predictions on the bottom row.]



Part 5: PSPNet qualitative results

[Paste a figure of the generated semantic segmentation from Colab. It should be a 2x3 grid, with ground truth on the top row, and your predictions on the bottom row.]