

1 Appendix

In this appendix, we present the qualitative results on Cityscapes validation set.

1.1 Visualization Result

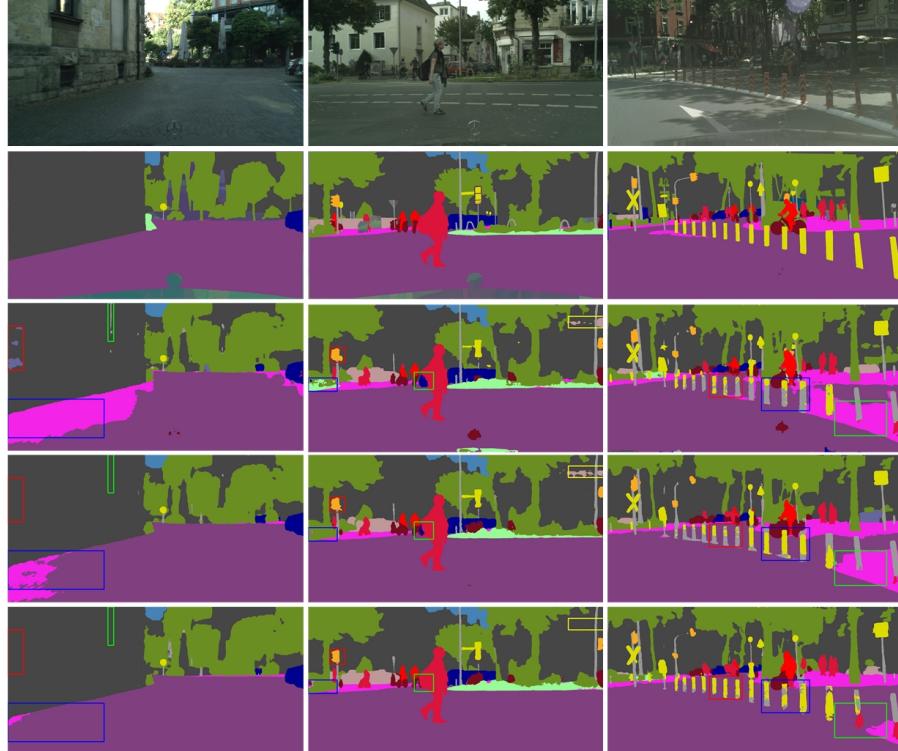


Fig. 1. Qualitative examples of the segmentation on Cityscapes validation set. From up to down: input image, ground-truth, prediction of baseline, and prediction of the proposed DDPNet without and with upsampling module.

The qualitative results on Cityscapes validation set are presented in Fig. 1. Here, we make a comparison between baseline and DDPNet without and with the upsampling module. The first and second rows are the input images and the corresponding ground-truths. The last three rows represent the predictions of baseline and the predictions of DDPNet without and with upsampling module respectively. As shown in the third and fourth rows, due to the ability to effectively aggregate feature maps at different scales, DDPNet can distinguish confusing categories with similar appearances, such as the building and wall in the first column, the vegetation and terrain in the second column, and the road

and sidewalk in the third column. Furthermore, we adopt the proposed upsampling module that leverages context information from feature maps to refine the heatmaps. As can be seen from the last two rows, DDPNet with upsampling module makes a better segmentation in the boundaries of objects and small objects, such as the traffic lights and people in the second column and the traffic signs in the last column.