Supplementary Materials for
InstanceCut: from Edges to Instances with MultiCut

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In Table 2 we present a detailed performance comparison. Fig. 7 contains the subset of difficult scenes where InstanceCut is able to predict most instances correctly. Fig. 8 contains failure cases of InstanceCut. The main sources of failure are: small objects that are far away from the camera, groups of people that are very close to camera and have heavy mutual occlusions, and occluded instances that have several disconnected visible parts.

Method	Metric	Mean	Person	Rider	Car	Truck	Bus	Train	Motorcycle	Bicycle
MCG+R-CNN [13]	AP	4.6	1.3	0.6	10.5	6.1	9.7	5.9	1.7	0.5
Uhrig et al. [48]	AP	8.9	**12.5**	**11.7**	22.5	3.3	5.9	3.2	6.9	**5.1**
InstanceCut	AP	**13.0**	10.0	8.0	**23.7**	**14.0**	**19.5**	**15.2**	**9.3**	4.7
MCG+R-CNN [13]	AP50%	12.9	5.6	3.9	26.0	13.8	26.3	15.8	8.6	3.1
Uhrig et al. [48]	AP50%	21.1	**31.8**	**33.8**	37.8	7.6	12.0	8.5	20.5	**17.2**
InstanceCut	AP50%	**27.9**	28.0	26.8	**44.8**	**22.2**	**30.4**	**30.1**	**25.1**	15.7
MCG+R-CNN [13]	AP100m	7.7	2.6	1.1	17.5	10.6	17.4	9.2	2.6	0.9
Uhrig et al. [48]	AP100m	15.3	**24.4**	**20.3**	36.4	5.5	10.6	5.2	10.5	**9.2**
InstanceCut	AP100m	**22.1**	19.7	14.0	**38.9**	**24.8**	**34.4**	**23.1**	**13.7**	8.0
MCG+R-CNN [13]	AP50m	10.3	2.7	1.1	21.2	14.0	25.2	14.2	2.7	1.0
Uhrig et al. [48]	AP50m	16.7	**25.0**	**21.0**	40.7	6.7	13.5	6.4	11.2	**9.3**
InstanceCut	AP50m	**26.1**	20.1	14.6	**42.5**	**32.3**	**44.7**	**31.7**	**14.3**	8.2

Table 2: CityScapes results. Instance-aware semantic segmentation results on the test set of CityScapes, given for each semantic class.

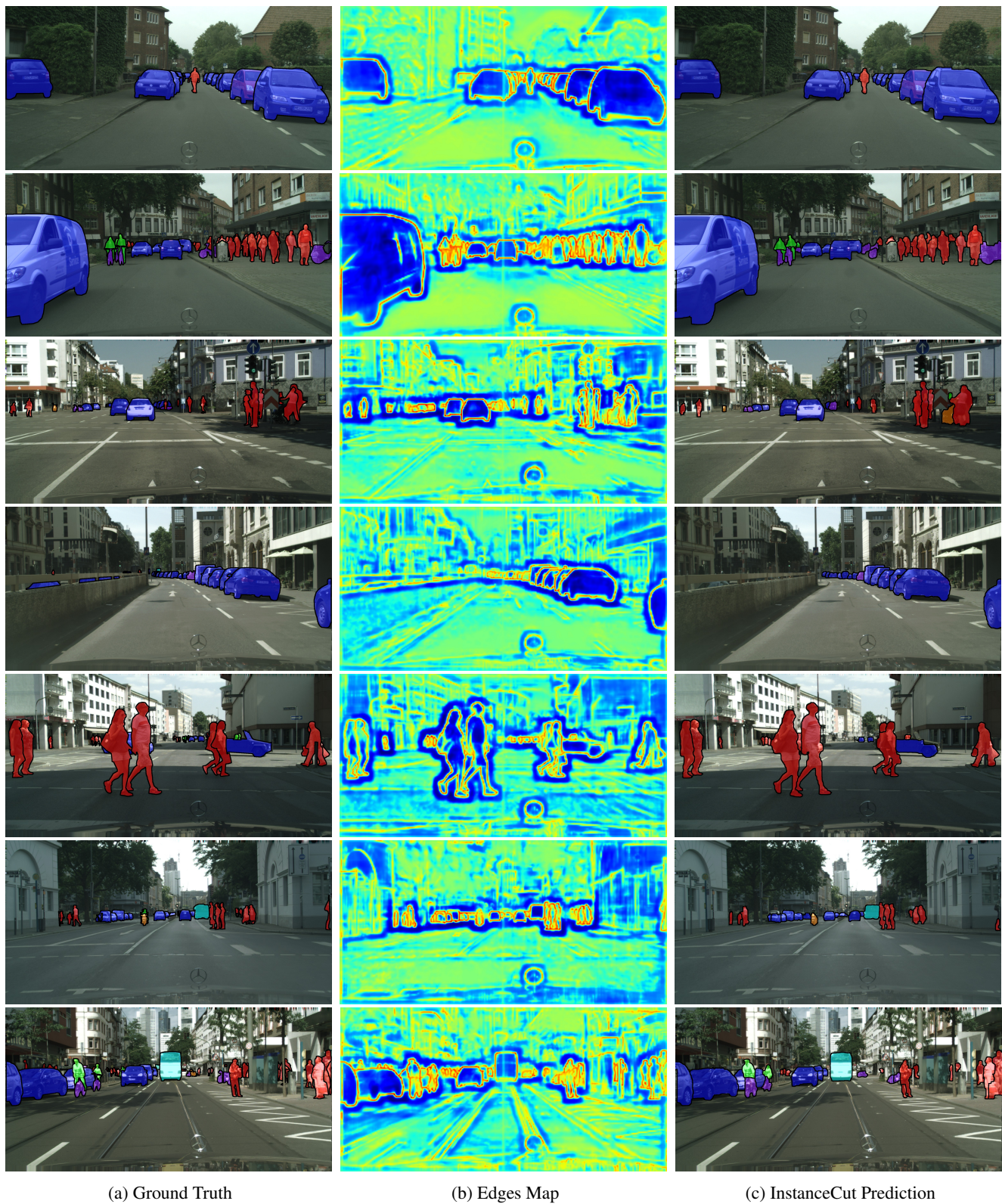| (a) Ground Truth | (b) Edges Map | (c) InstanceCut Prediction |

Figure 7: Curated difficult scene, where InstanceCut performs well. The left column contains input images with ground truth instances highlighted. The middle column depicts per-pixel instance-aware edge log-probabilities and the last column shows the results of our approach.

(a) Ground Truth   (b) Edges Map   (c) InstanceCut Prediction
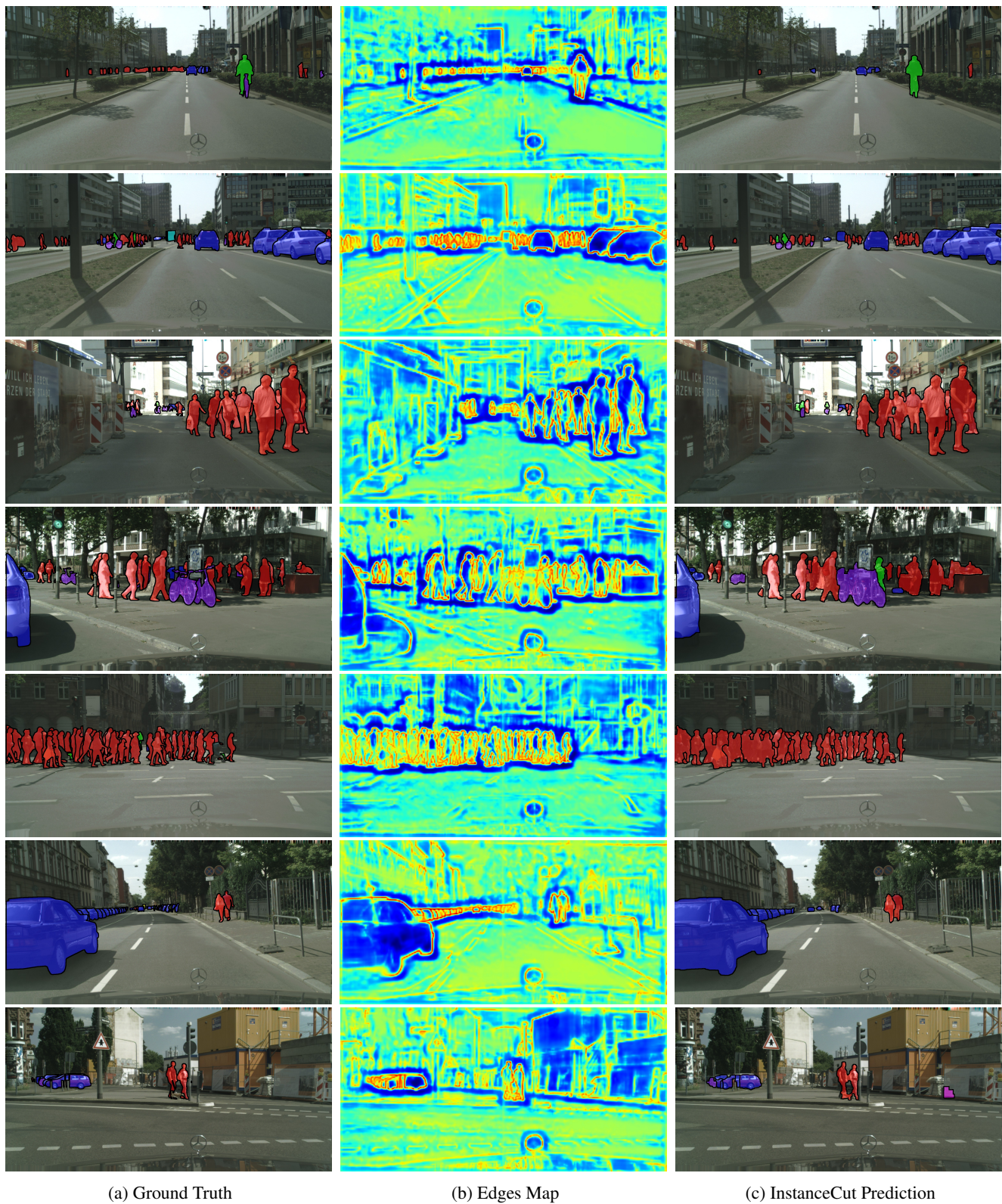
Figure 8: Failure cases. The left column contains input images with ground truth instances highlighted. The middle column depicts per-pixel instance-aware edge log-probabilities and the last column shows the results of our approach.