Interclass Prototype Relation
for Few-Shot Segmentation
Supplementary Material

Atsuro Okazawa

R&D Promotion Office AI Strategy Office,
SoftBank Corp., Tokyo, Japan
atsuro.okazawa@g.softbank.co.jp

1 More qualitative results on COCO-20^i

We additionally show the recognition results of all splits. They are using our proposed method, baseline and HSNet. The red shade is the area of the target class. It is the ground truth in the case of query and the recognition result in the cases of HSNet, baseline and ours. The blue shade is the ground truth area in the case of support.

Fig. 1. Recognition results of 1 person and 13 park meter in s-0. They experiment with ResNet-50 5shot setting on COCO-20^i.

Fig. 2. Recognition results of 29 suitcase, 61 dining table, 65 mouse, 69 microwave and 73 fridge in s-0. They experiment with ResNet-50 5shot setting on COCO-20^i.
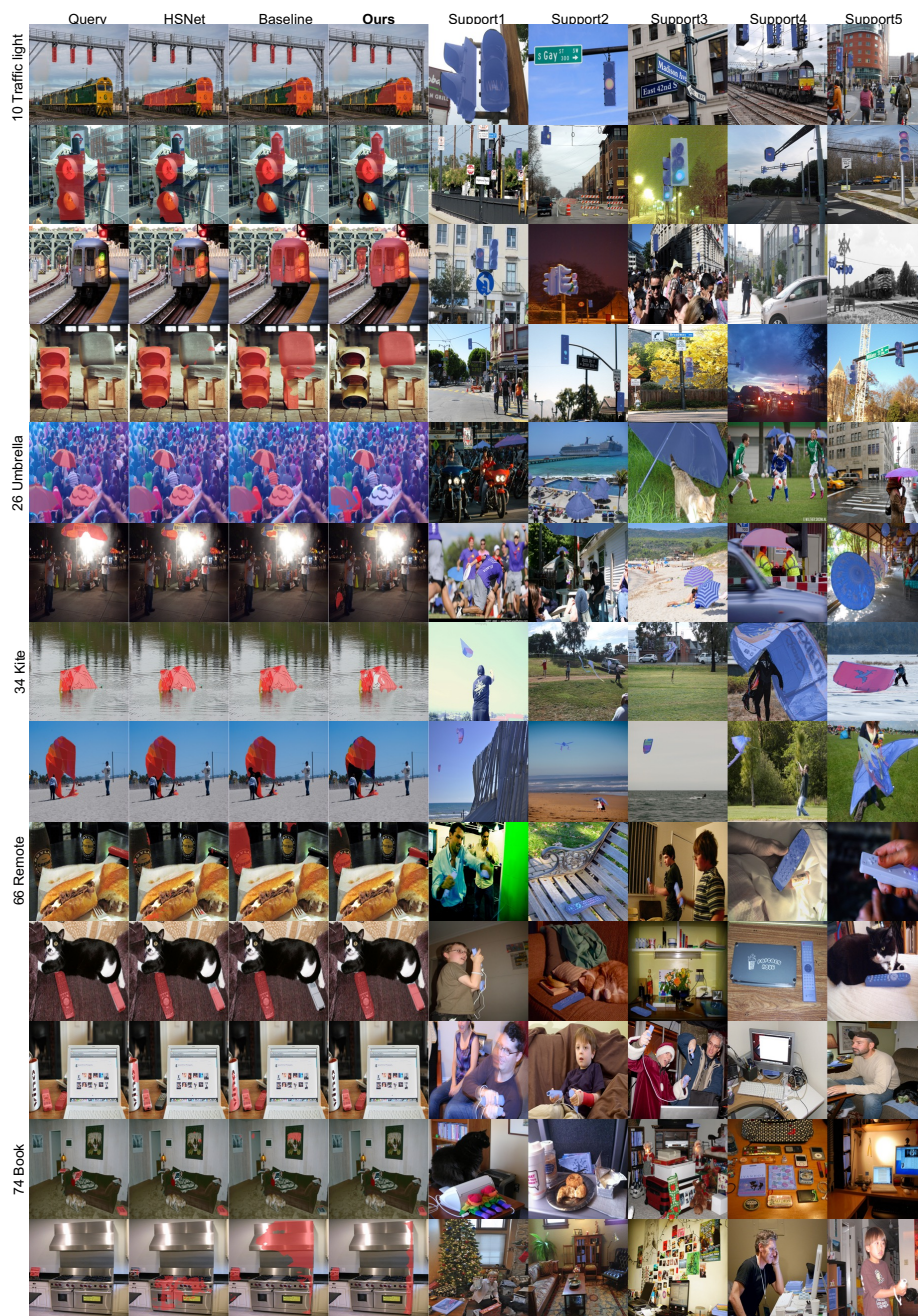
Fig. 3. Recognition results of 10 traffic light, 26 umbrella, 34 kite, 66 remote and 74 book in s-1. They experiment with ResNet-50 5shot setting on COCO-20^i.

Fig. 4. Recognition results of 27 handbag, 59 potted plant and 67 keyboard in s-2. They experiment with ResNet-50 5shot setting on COCO-20^i.

Fig. 5. Recognition results of 4 motorcycle, 44 knife, 48 apple and 80 toothbrush in s-3. They experiment with ResNet-50 5shot setting on COCO-20^i.

2   Additional experiments

IPRNet, which we propose, is a method that utilizes the relationships between the various classes hidden in the batch. Since class diversity depends on batch size when training, we conducted additional experiments on the relationship between batch size and performance. The following Fig.6 presents the results. They experiment with ResNet-50 5shot setting on s-0 of COCO-20^i.
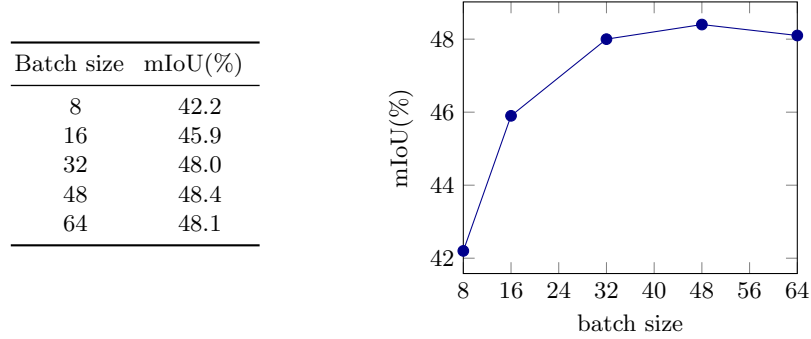
Batch size	mIoU(%)
8	42.2
16	45.9
32	48.0
48	48.4
64	48.1

Fig. 6. Influence of the batchsize and mIoU. They experiment with ResNet-50 5shot setting on s-0 of COCO-20^i. We changed the batch size when training. The left shows mIoU value for each batch size. The right is a graph that shows the change in mIoU depending on the batch size.