MaskLab: Instance Segmentation by Refining Object Detection with Semantic and Direction Features - Supplementary Material -

Liang-Chieh Chen¹, Alexander Hermans^{2*}, George Papandreou¹, Florian Schroff¹, Peng Wang^{3*}, Hartwig Adam¹ Google Inc.¹, RWTH Aachen University², UCLA³

Abstract

The supplementary material contains more qualitative results. Specifically, we provide more visualization results of learned semantic and direction features as well as more predicted mask results.

1. More Qualitative Results

Semantic and direction features: In Fig. 1, we provide more visualization results of learned semantic and direction features. In particular, we visualize the 'person' channel in the learned semantic segmentation logits and show the cropped semantic logits and assembled direction logits.

Predicted masks: In Fig. 2, we show more visualization results produced by our proposed model.

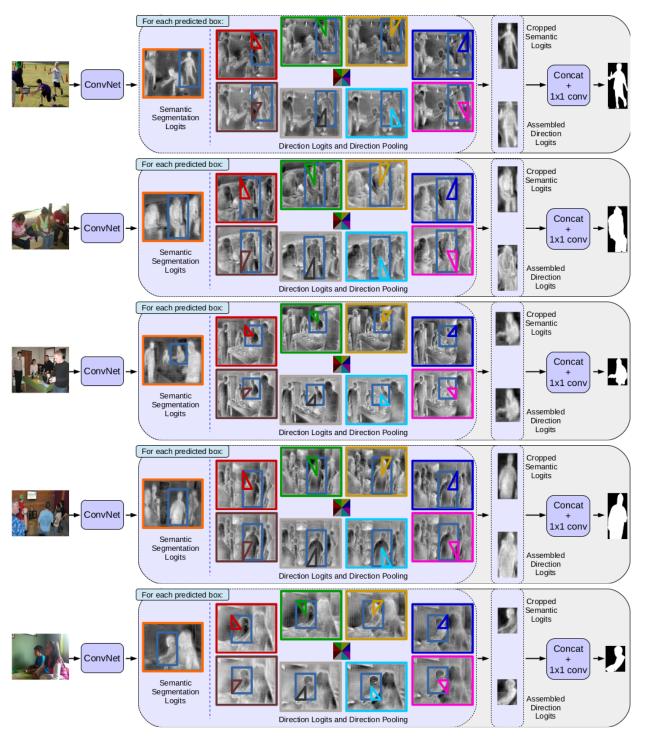


Figure 1. Semantic segmentation logits and direction prediction logits are used to perform foreground/background segmentation within each predicted box. In particular, segmentation logits are able to distinguish instances of different semantic classes (*e.g.*, person and background), while direction logits (directions are color-coded) further separate instances of the same semantic class (*e.g.*, two persons in the predicted box). In assembling operation, regional logits (the color triangular regions) are copied from each direction channel.



Figure 2. Visualization results on the *minival* set.