

PhD

Mask R-CNN ax17_4 iccv17

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Add branch to faster RCNN that predicts the pixel wise mask in parallel to the bounding box regression;

Supposed to add a very small overhead to the detector and run at about 5 FPS;

Winner of all 3 categories of Coco 2016;

replaces the ROI pooling layer of faster RCNN with a custom-designed ROI align layer so as to avoid the coarse quantization that the former is subject to and preserve the exact spatial layout;

Decouples mask generation and classification so that a mask is generated for each class independently and there is no competition between the classes, the correct mask being chosen based on the output of the classifier

Uses a multi task loss which simply sums up the individual losses derived from the classification, box prediction and mask prediction;