OverFeat,FCN

【目标】We have presented Region Proposal Networks (RPNs) for efficient and accurate region proposal generation.

【问题】所谓的共享卷积层是什么？权值共享不是一开始就有嘛（据Table2中所知，能减少时间）

【问题】SS?ZF-NET? VGG ZF+SS

Summary

A box-regression layer and a box-classification layer

we introduce novel Region Proposal Networks (RPNs) that share convolutional layers with state-of-the-art object detection networks

Intersectionover-Union (IoU), IoU overlap

Ablation Experiments:

1. 测试RPN与Fast R-CNN之间的共享卷积网络
2. we disentangle the RPN’s influence on training the Fast R-CNN detection network
3. 单独测试分类与回归定位两个网络

【RPN比OverFeat多的地方】Stages的解答：

In OverFeat, the region-wise features come from a sliding window of one aspect ratio over a scale pyramid.

OverFeat is a one-stage, class-specific detection pipeline

ours is a *two-stage cascade* consisting of class-agnostic proposals and class-specific detections.

=>one-stage is slower than two-stages

【变化】different scales and different aspect ratios