RetinaFace 在 PC 端的搭建流程

1．Download our annotations (face bounding boxes & five facial landmarks) from baidu cloud or dropbox

将下载的 annotations 按照以下路径安排好：insightface/RetinaFace/

```
data/retinaface/
    train/
      images/
      label.txt
    val/
      images/
      label.txt
    test/
      images/
      label.txt
```

2．Download the WIDERFACE dataset，解压放置 datasets 下；

3．Install MXNet with GPU support.自行从网上找教程，很多；

4．如果想在网络里使用可变形卷积模块，请下载 Deformable-ConvNets；

5．利用预训练模型测试，python test.py;下载下面的预训练模型，放置ｍｏｄｅｌ文件下；

Pretrained Model: RetinaFace-R50 (baidu cloud or dropbox) is a medium size model with ResNet50 backbone. It can output face bounding boxes and five facial landmarks in a single forward pass.

6.利用 train.py 训练模型;

(1) Copy rcnn/sample_config.py to rcnn/config.py

(2) Download ImageNet pretrained models and put them into model/(these models are not for detection testing/inferencing but training and parameters initialization).

ImageNet ResNet50 (baidu cloud and dropbox).

ImageNet ResNet152 (baidu cloud and dropbox).

(3) Start training with CUDA_VISIBLE_DEVICES='0,1,2,3' python -u train.py --prefix ./model/retina --network resnet.

可以通过调整 rcnn/config.py 文件调节网络训练的参数。测试效果如下: