The following steps are to run the pre-trained DDS model on the faster RCNN framework of Jianwei Yang’s implementation (Yang, Lu, Batra and Parikh, 2017 https://github.com/jwyang/faster-rcnn.pytorch).

1. Follow up installation instructions of faster-rcnn.pytorch-1.0 version to set up the running environment.

2. Download the DDS model named faster\_rcnn\_1\_10\_999.pth and put it in models folder.

3. Download the testing samples and unzip the data folder.

4. Change the predicted pascal\_classes to ‘blob’ and ‘\_\_background\_\_’ in demo.py, readRec.py, lib/datasets/pascal\_voc.py

5. Run the test\_net.py to detect all testing images and set the running parameter as ‘--net vgg16 --checksession 1 --checkepoch 10 --checkpoint 999 --cuda --load\_dir ./models’. The all detection boxes output will be in data/VOCdevkit2007/results/VOC2007/Main/comp4\_det\_test\_blob.txt

6. You also can copy and paste the testing images in JPEGImages folder to images folder for running demo.py for visualization detection results in images folder.