SSH and export display like document says.

Cd to /tmp

Expand yolo4.tgz inside darkflow repositort

# Download the Pascal VOC dataset:

curl -O https://pjreddie.com/media/files/VOCtest\_06-Nov-2007.tar

tar xf VOCtest\_06-Nov-2007.tar

# An example of the Pascal VOC annotation format:

vim VOCdevkit/VOC2007/Annotations/000001.xml

# Train the net on the Pascal dataset:

flow --model cfg/yolo-new.cfg --train --dataset "~/VOCdevkit/VOC2007/JPEGImages" --annotation "~/VOCdevkit/VOC2007/Annotations"

# Train YOLOv4:

Enter yolov4 directory from yolov4-custom-LOCAL thing

../.././darknet detector train data/obj.data cfg/yolov4-custom.cfg yolov4.conv.137 -map

# Perform test:

Guide command:

/darknet detector test data/obj.data cfg/yolov4-custom.cfg yolov4.conv.14 ../../training/yolov4-custom\_best.weights ../../data /person.jpg -thresh 0.3

# MATLAB

~~Check documentation for yolov2 training function from THAnet. If image data store parameter is the same as the trainNetwork parameter then we can just reuse the cds variable.~~

Look for documentation about building custom object detector deep learning network and see if we can reuse resNet-101 architecture for doing that.

~~See documentation for function Yolov4ObjectDetector and see why anchorboxes isn’t working, maybe check documentation about making anchorboxes a ‘cell’.~~

See other networks and figure out how to make an output layer for the yolov4 network. This option is shady because this might not count as a yolov4 network since the most commone yolov4 implementations are based on Resnet and darknets. Specifically darknet 53 was used in the yolov3 paper as it outperformed equivalent resnets

Also check out darknet-53 from yolov3 to maybe base yolov4 on since that’s what they used in the paper. It should be in MATLAB, use it if it’s there.

Just get something working for YOLOv4.

Trying resnet-50 since there is an example in matlab documentation – see if the outputLayers can be modified/added for the number of classes and pray to god that it works.

Get ResNet working, if it does not work try out Faster RCNN from MATLAB and compare performance.