1. Install 5.2.0 anaconda
2. pip install msgpack
3. pip install tensorflow
4. pip install numpy
5. pip install pillow==4.0.0
6. pip install opencv-python
7. Download <https://www.dropbox.com/s/akf6rqektlbe2vq/windows_v1.2.zip?dl=1>
8. Watch this video <https://youtu.be/K_mFnvzyLvc?list=PLQVvvaa0QuDcNK5GeCQnxYnSSaar2tpku>

This is to capture the picture and convert into xml – this process is labelling

1. At this point, we should have an images directory, inside of that has all of your images, along with 2 more diretories: train and test. Inside the test directory should be a copy of ~10% of your images with their XML annotation data, and then the training directory should have a copy of the rest
2. Download tensor models from <https://github.com/tensorflow/models/tree/master/>
3. pip install Cython
4. pip install lxml
5. pip install jupyter
6. pip install matplotlib
7. pip install protobuf==3.4.0 (or) conda install protobuf
8. pip install pandas
9. To set python as PATH variable :

* Append the following at the end of existing path variable in ENVIRONMENT VARIABLES.

C:\Users\saavvaru\AppData\Local\Continuum\anaconda3;C:\Users\saavvaru\AppData\Local\Continuum\anaconda3\Scripts;

1. protoc --python\_out=. object\_detection/protos/\*.proto wont work. We have individually execute each proto

else copy this zip



1. set PYTHONPATH= C:\Users\saavvaru\AppData\Local\Continuum\anaconda3;C:\Users\saavvaru\Documents\Firm activities\tensorflow\models;C:\Users\saavvaru\Documents\Firm activities\tensorflow\models\slim;C:\Users\saavvaru\Documents\Firm activities\tensorflow\models\object\_detection;
2. Run generate\_tfrecord.py
   1. Run for test.csv
   2. Run for train.csv
3. Change the configuration in ssd\_mobilenet\_v1\_pets.config
4. Download and unzip to object\_detection/

http://download.tensorflow.org/models/object\_detection/ssd\_mobilenet\_v1\_coco\_11\_06\_2017.tar.gz

1. Copy all directories from C:\Users\saavvaru\Documents\Firm\_activities\Image\_Detection to C: \tensorflow\models\object\_detection
   1. Data
   2. Image
   3. Tranining
2. C: \tensorflow\models\object\_detection>python train.py --logtostderr --train\_dir=training/ --pipeline\_config\_path=training/ssd\_mobilenet\_v1\_pets.config
3. C:\tensorflow\models\object\_detection>tensorboard --logdir="C:\tensorflow\models\object\_detection\training"
4. python export\_inference\_graph.py --input\_type=image\_tensor --pipeline\_config\_path="C:\tensorflow\models\object\_detection\training\ssd\_mobilenet\_v1\_pets.config" --trained\_checkpoint\_prefix="C:\tensorflow\models\object\_detection\training\model.ckpt-90" --output\_directory="C:\tensorflow\models\object\_detection\chandu\_inference\_graph"