LOGO DETECTION STEPS

1. Download the dataset from the given link:

<http://image.ntua.gr/iva/datasets/flickr_logos/flickr_logos_27_dataset.tar.gz>

and unzip it inside a folder with 4 text files . Then again unzip the flickr\_logo.

1. After that open the terminal or cmd(administrator) and install following packages:

Pip install tensorflow

Pip install opencv-python

Pip install scipy

Pip install sklearn

Pip install selectivesearch

Pip install numpy

1. Now unzip all the codes in the same folder where you kept the flickr logo folder
2. Now run the command: *python3 GEN\_TEXT.py*

This will generate the  train\_annot\_with\_bg\_class.txt file

1. Once it is completed then run : *python3 CROP\_N\_AUG.py*

As we do not have large no. of images so this code will crop the images in size of 64x32 from the Flickr image folder and apply augmentation method to make the dataset large for

Training .This code also classifies the images brand wise which will be found inside

This automatically created folder*: flickr\_logos\_27\_dataset\_cropped\_augmented\_images*

Pickle file also be created here which contains features of the images such as width, height and no. of channel.

1. Then run : *python3 TRAIN\_TEST\_SPLIT.py*

This will create train(90%) test(10%) partition for each brand inside *flickr\_logos\_27\_dataset\_cropped\_augmented\_images* this folder and create the pickle files

1. Then run the : *pyhton3 MODEL.py*

This is the code for train the model and the trained models will be saved inside train\_models folder. These are the parameter for training I have used. You can change these values in MODEL.py

LEARING\_RATE = 0.0001

MAX\_STEPS = 20001

BATCH\_SIZE = 64

PATCH\_SIZE = 5

1. Once model is trained and saved then run : *python3 DETECT.py <test\_image\_filename.jpg>*

Place the test image where you kept all the codes.

This is the threshold probability used for detection:

PRED\_PROB\_THRESH = 0.999

You can lower this value at the top portion of the code DETECT.py