**Data Scrapping**

**1. Image Scrapping :**

File Location customidz/**image\_scrapping.py**

Replace variable `search\_term` value with the search string. Replace number of images in search\_and\_download() function argument at line 142.

It will download images from google and save in *images*/<search\_term> directory.

Selenium library is used

**2. Video Scrapping:**

File Location customidz/**video\_scrapping.py**

Replace variable `search\_term` value with the search string. Replace number of videos in search\_and\_download() function argument at line 29.

It will download videos from youtube and save in *images*/<search\_term> directory.

Youtube API is used

**Data**

**Images dir :** *darknet*/custom\_data/images/piling\_machine

**Labels dir :** darknet/custom\_data/labels/piling\_machine

**Training images (0.8) :** darknet/custom\_data/train.txt

**Test images (0.2) :** darknet/custom\_data/test.txt

**Config File :** darknet/custom\_data/cfg/yolov3-custom.cfg

**Weights dir:** darknet/custom\_data/backup

**Predicted Output : /**output

**Steps to Test (on Test images)**

1. Make the ground truth sheet from labels using ground\_truth\_sheet.py, it will create a csv file

ground\_truth\_sheet.csv [already created, no need to re-run the program]

2. open detector.py file and do the following changes:

* Change cust\_dir path variable at line 132 to point to customindz folder.
* For getting Confusion Matrix,Accuracy, Recall, Precision, F1\_score change

change view argument to `False` in prediction() function at line 133.

* It will create prediction\_sheet.csv file and will calculate the the metrics by calling

testing.py file.

It will create a file **report.csv**, where you can see accuracy at different iou thresholds.

* For viewng test images along with predicted bounding box,

change view argument to `True` in prediction() function at line 133.

prediction(cust\_dir,view=True)

**Detect Your own Image :**

1. Open **single\_file\_detector.py** and Update Cust\_dir variable path to customindz folder at line 102.

2. Give image path in detector() function argument at line 103.

**Video Feed:**

To see video output, change variable cap at line 28 of **existing\_video\_feed.py** file to your video

link.