**what is YOLO v2 (aka YOLO 9000)**

YOLO9000 is a high speed, real time detection algorithm that can detect on **OVER 9000!** (object categories)

* you can read more about it here (<https://arxiv.org/pdf/1612.08242.pdf>)
* watch a talk on it here (<https://www.youtube.com/watch?v=NM6lrxy0bxs>)
* and another talk here (<https://www.youtube.com/watch?v=4eIBisqx9_g>)

**Step1 - Requirements**

* **Python 3.5 or 3.6**. Anaconda (install tutorial <https://www.youtube.com/watch?v=T8wK5loXkXg>)
* **Tensorflow** (tutorial GPU verions (<https://www.youtube.com/watch?v=RplXYjxgZbw&t=91s>)
* **openCV** (<https://www.lfd.uci.edu/~gohlke/pythonlibs/>)
* **Cython** (pip install cython)

**Step2 - Download the Darkflow repo**

* <https://github.com/thtrieu/darkflow>
* extract the files somewhere locally

**Step3 - Build the library**

* open a cmd window and type

python setup.py build\_ext --inplace

OR

pip install -e .

**Step 4 - Download a weights file**

* Download the YOLOv2 608x608 weights file here (<https://pjreddie.com/darknet/yolov2/>)
* NOTE: there are other weights files you can try if you like
* create a bin folder within the darkflow-master folder
* put the weights file in the bin folder

**Processing a video file**

* move the video file into the ``darkflow-master```
* from there, open a cmd window
* use the command

python flow --model cfg/yolo.cfg --load bin/yolov2.weights --demo videofile.mp4 --gpu 1.0 --saveVideo

videofile.mp4 is the name of your video.

NOTE: if you do not have the GPU version of tensorflow, leave off the --gpu 1.0

--saveVideo indicates to save a name video file, which has the boxes around objects