Visual Object Detection System

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1 Build Instructions

- Python Dependencies to be installed
  - numpy
  - opencv
  - cython
  - shutil
  - glob
  - os
  - sys
  - xml
- Once the python dependencies are installed. Move to the downloaded directory.
- Run these commands to install YOLO tensor flow dependencies.
  - python setup.py build_ext –inplace
  - pip install .
  - python flow –model cfg/yolo.cfg –load yolo.weights –savepb
- Now we are all set to work on the detection system
- As the first step, run the train_phone_finder.py
  - python train_phone_finder.py /find_phone
  - /find_phone is the path to the folder containing the images to be trained and label.txt. In our case, it is the find_phone folder.
- Now, the above files generates images in phone_images_directory folder and xml files corresponding to the images in the annotations directory. Make sure that for every run you clean up this folder. Don't delete the folder though. Further, the checkpoints are stored in the corresponding folders.
- Now we can test the detection system
  - python find_phone.py Image path to be tested
- You get the desired output once you run the above command.