To Do:

1. Create a way to measure & **visualize** Metrics of Model
   * mAP & iou for both the RPN & RCNN

RPN: (Region Proposal Network)

RCNN: (Region-based Convolutional Neural Network)

1. Create 2nd NN to read Text within the bbox candidate results from 1st NN
2. ~~Implement new LPDataSet structure to comply with new dataset format~~

~~filename,min\_x,min\_y,max\_x,max\_y,class => filename,width,height,class,xmin,ymin,xmax,ymax~~

1. Create a Model Prediction API Script
   * take in photo print out LP text
2. Create App-Model (ReactJS-Python) Interface
   * send photo from app to model, then model returns LP Text prediction to App
3. ~~Implement Data Augmentation for Images during training~~
   * ~~Flip Horizontal/Vertical~~
   * ~~Brightness~~
   * ~~Noise~~
   * ~~Random Crop~~
   * ~~Blur~~
   * ~~Shear~~
4. ~~Create Model Runner with CLI Args for params~~
   * ~~Possible Args:~~

~~training or eval mode~~

~~weights load\_from dir~~

~~weights save\_to dir~~

print output of # of sample predictions

print or view metrics

print validation status every X epochs