0616066_HW2_report

GitHub link: https://github.com/ryanlu2240/2020fall_DLCV/tree/master/HW2
Reference: https://github.com/AlexeyAB/darknet

```
data/val/9280.png: Predicted in 17.279000 milli-seconds.
2: 86%  (left_x:   19   top_y:    6   width:    9   height:   15)
10: 70% (left_x:   27   top_y:    7   width:   10   height:   14)
Enter Image Path:  Detection layer: 139 - type = 28
 Detection layer: 150 - type = 28
 Detection layer: 161 - type = 28
```

Speed: 17.29 ms

Brief introduction: I use yolov4, I only have to preprocess the data and annotation to right format, darknet done the rest of the job.

Methodology: the format is every picture follow with a annotation.txt, and the annotation format is <label> <center_x> <center_y> <box_width> <box_hieght>, I train the network for 5000 iterators

Summary: darknet is very easy to use, even with costume dataset, both train and test can done in one line of code, yolov4 works very accuracy and fast, testing single image only need 18 ms