

## Appendix

### (1). SingleAnnotation.py

```
import os
import xml.dom.minidom as minidom
import numpy as np
import cPickle
import subprocess

def readSingleAnno(filename):
    with open(filename) as f:
        data = f.read()

    import re
    objs = re.findall('\(\d+, \d+\) [\s\-\]+\(\d+, \d+\)',
data)

    num_objs = len(objs)

    boxes = np.zeros((num_objs, 4), dtype=np.uint16)
    gt_classes = np.zeros((num_objs), dtype=np.int32)
    overlaps = np.zeros((num_objs, 2), dtype=np.float32)

    # "Seg" area here is just the box area
    seg_areas = np.zeros((num_objs), dtype=np.float32)

    # Load object bounding boxes into a data frame.
    for ix, obj in enumerate(objs):
        # Make pixel indexes 0-based
        coor = re.findall('\d+', obj)
```

```
x1 = float(coor[0])
y1 = float(coor[1])
x2 = float(coor[2])
y2 = float(coor[3])
boxes[ix, :] = [x1, y1, x2, y2]
seg_areas[ix] = (x2 - x1 + 1) * (y2 - y1 + 1)
return boxes
```

## (2). BatchAnnotations.py

```
import os
import numpy as np
import singleAnnotation as sann

#folder = "F:\INRIAPerson\Train\annotations"
#path = 'F:\INRIAPerson\Train\annotations\'
path = 'F:\INRIAPerson\Test\annotations\'
print path

imagelist = open('ImageList.txt', 'w')
annotations = open('annotations.txt', 'w')
for root, dirs, files in os.walk(path):
    for fn in files:
        #print (root + fn)
        imagelist.writelines(root + fn + '\n')
        boxes = sann.readSingleAnno(root + fn)
        #print len(boxes)
        annotations.writelines(root + fn + str())
            #str(boxes[0][0]) + '\n')

    for i in range(0, len(boxes)):
        annotations.writelines(str(boxes[i][0]) + ' ' +
            str(boxes[i][1]) + ' ' +
            str(boxes[i][2]) + ' ' +
            str(boxes[i][3]) + ' ')

    annotations.writelines('\n')

imagelist.close()
annotations.close()
```