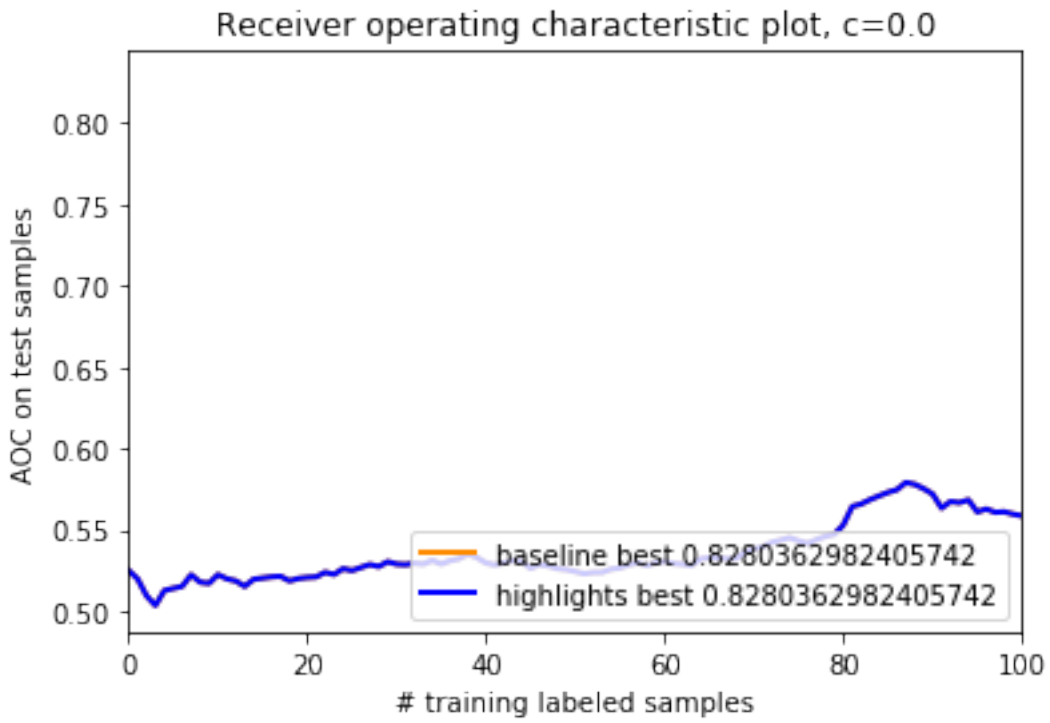
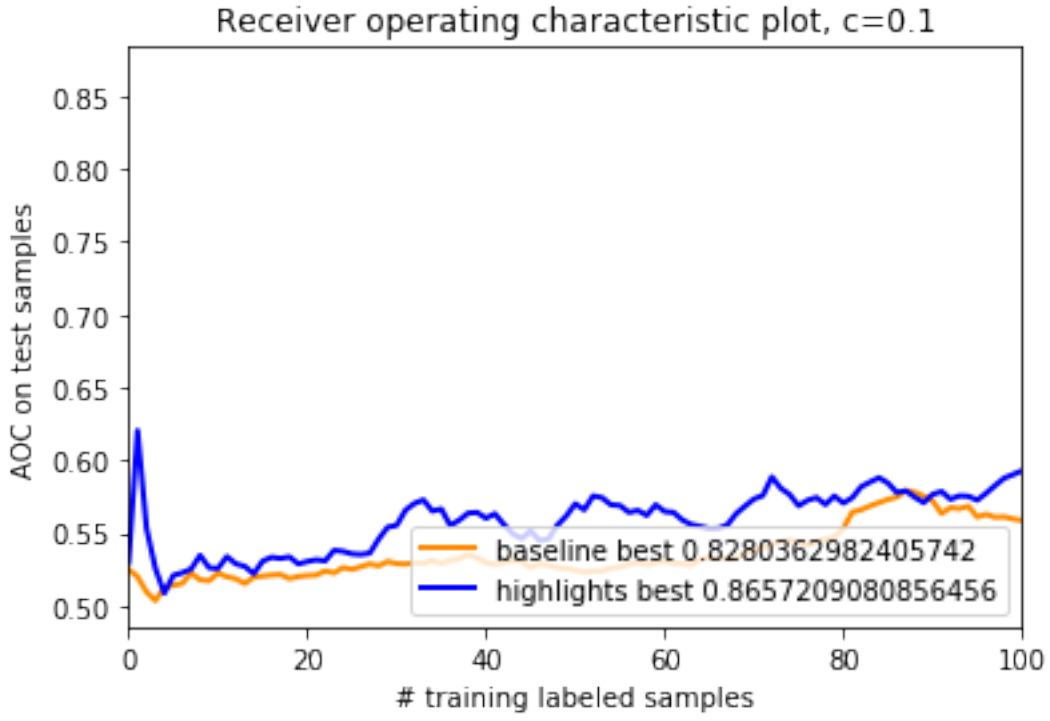
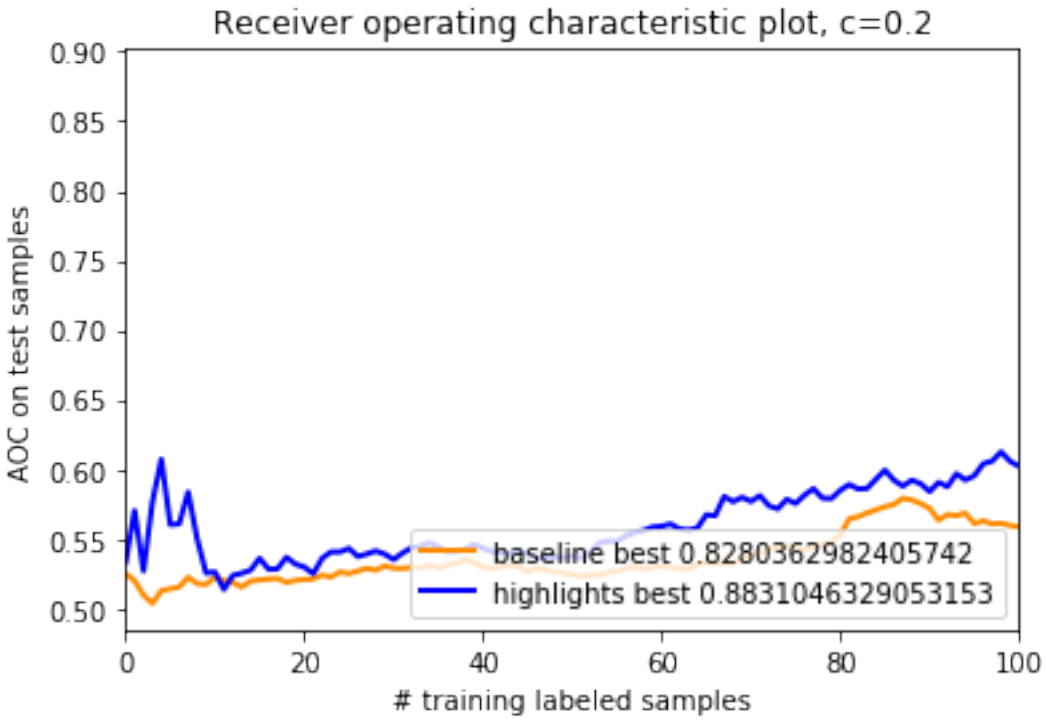
visualize_results

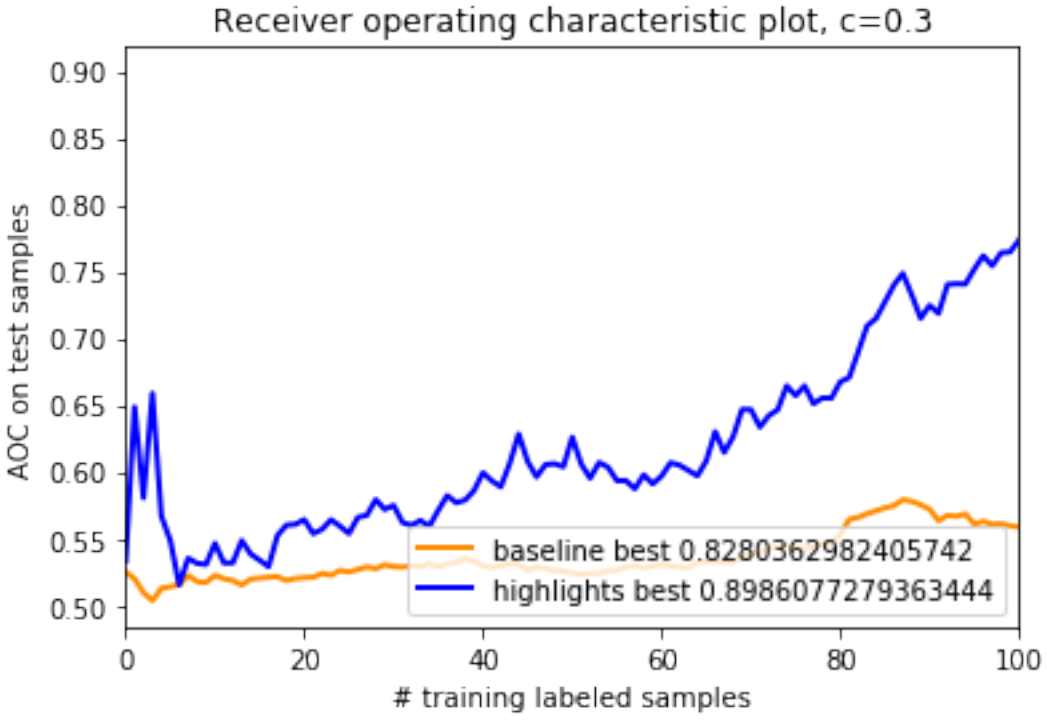
January 20, 2019

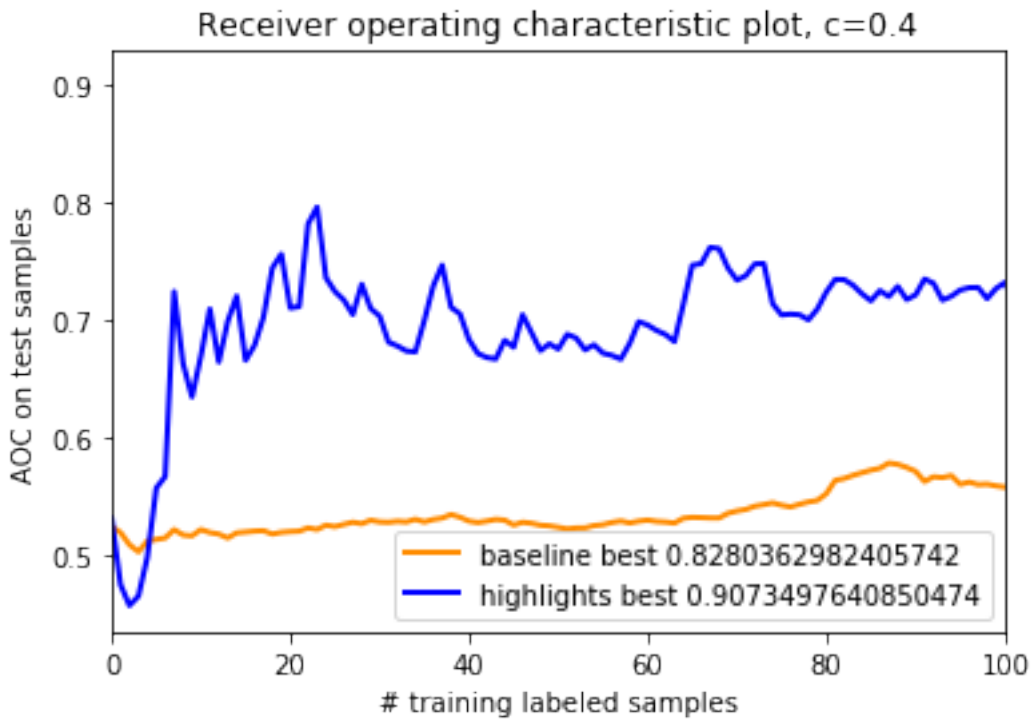
In [20]:
```
# Compute ROC curve and ROC area for each class
%matplotlib inline

import matplotlib
import numpy as np
import matplotlib.pyplot as plt
import pickle

for c in [0.0,0.1,0.2,0.3,0.4,0.5,0.6,0.7,0.8,0.9,1.0]:
    # get the file
    high_auc = pickle.load(  open('high_auc_'+str(c)+'_1.pkl', "rb" ) )
    norm_auc = pickle.load(  open('norm_auc_'+str(c)+'_1.pkl', "rb" ) )
    best_high = max(high_auc)
    best_base = max(norm_auc)

    plt.figure()
    lw = 2
    plt.plot(norm_auc,color='darkorange',lw=lw, label='baseline best ' + str(best_base
    plt.plot(high_auc,color='blue',lw=lw, label='highlights best ' + str(best_high) )
    plt.xlim([0.0, 100.0])
    #plt.ylim([0.525, 0.55])
    plt.xlabel('# training labeled samples')
    plt.ylabel('AOC on test samples')
    plt.title('Receiver operating characteristic plot, c='+str(c))
    plt.legend(loc="lower right")
    plt.show()
```

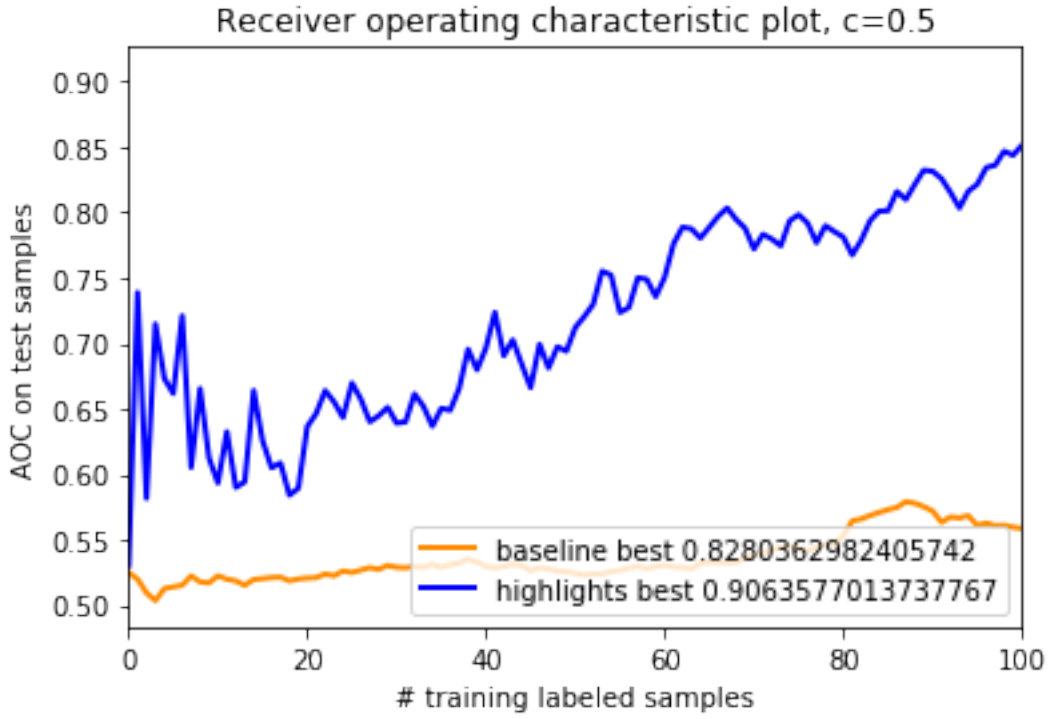

Receiver operating characteristic plot, c=0.0
AOC on test samples
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0
20
40
60
80
100
training labeled samples
baseline best 0.8280362982405742
highlights best 0.8280362982405742

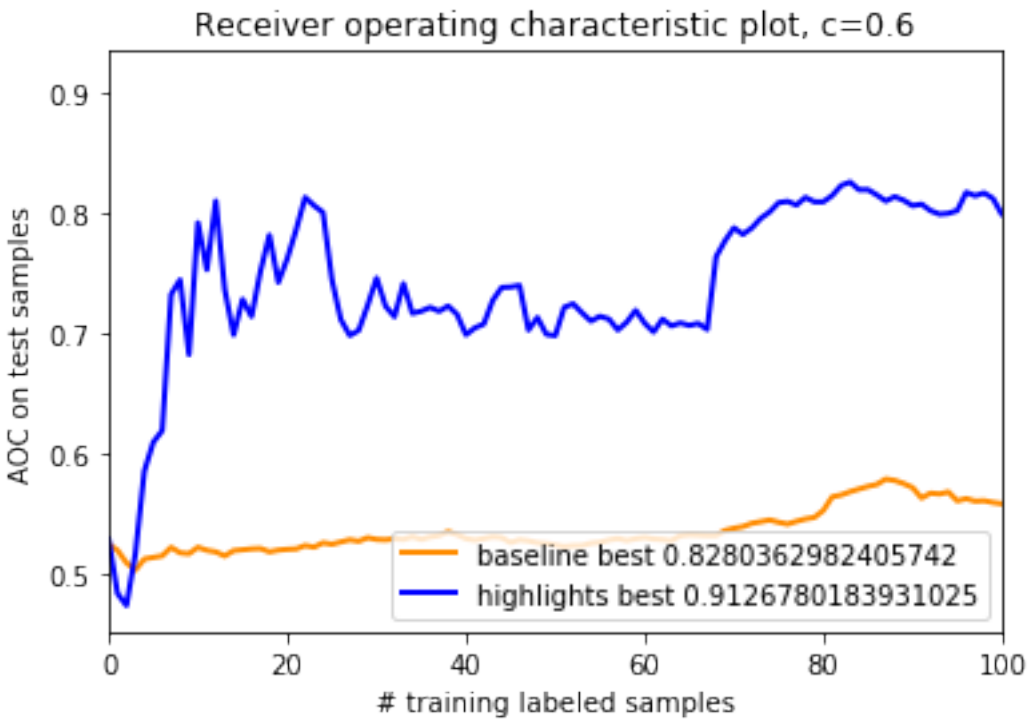

Receiver operating characteristic plot, c=0.1
AOC on test samples
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0
20
40
60
80
100
training labeled samples
baseline best 0.8280362982405742
highlights best 0.8657209080856456

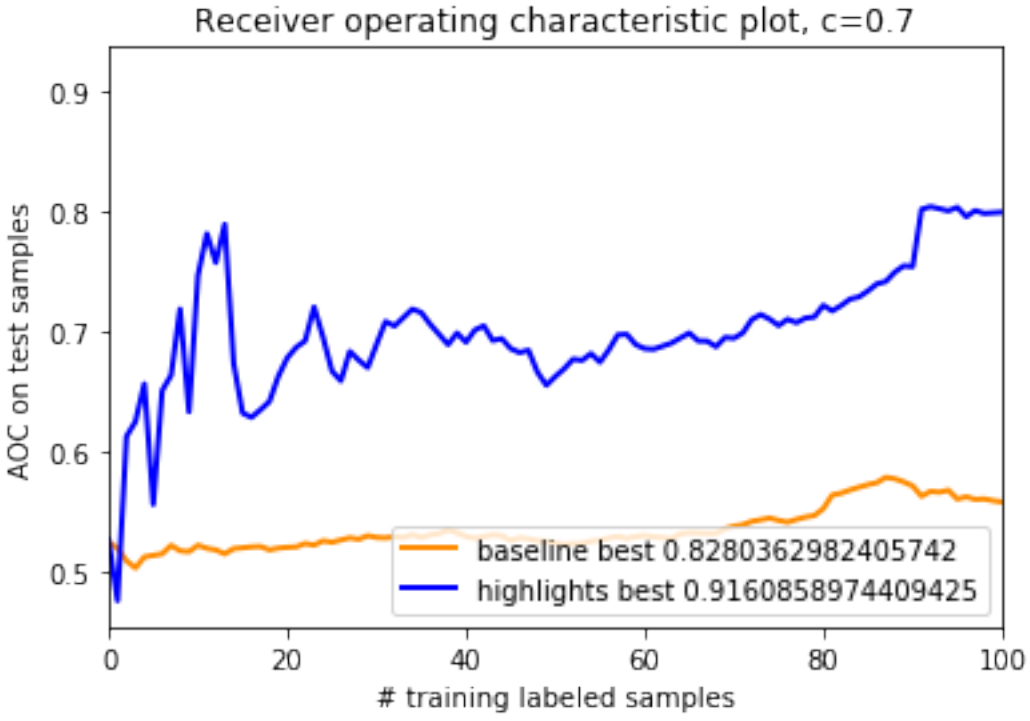

Receiver operating characteristic plot, c=0.2
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.8831046329053153
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0
20
40
60
80
100

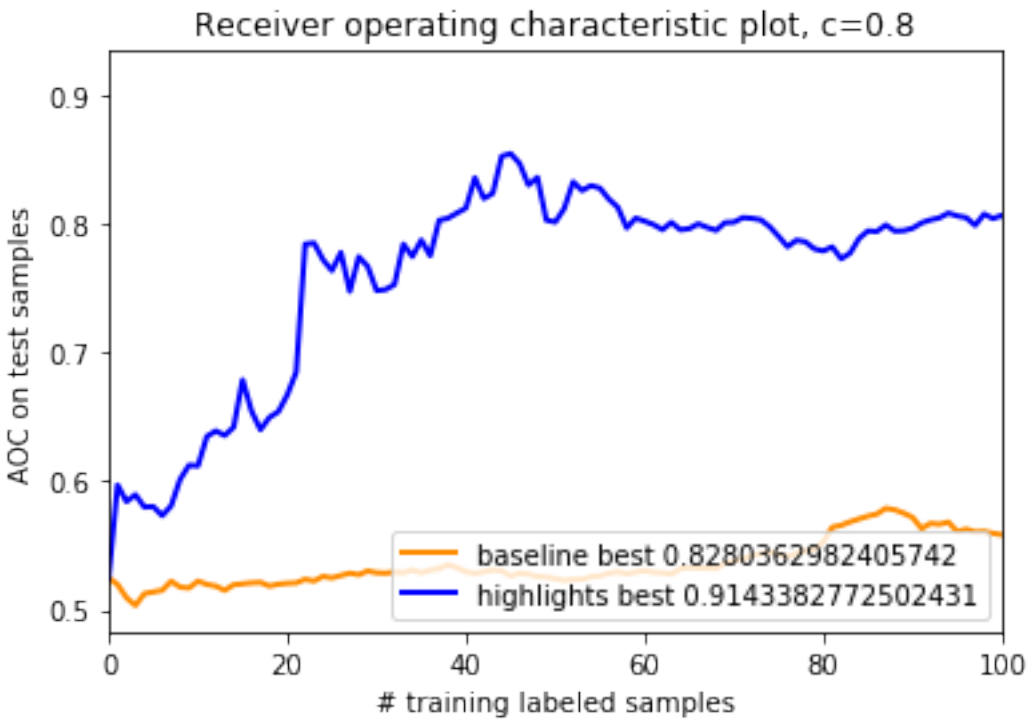

Receiver operating characteristic plot, c=0.3
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.8986077279363444
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0
20
40
60
80
100

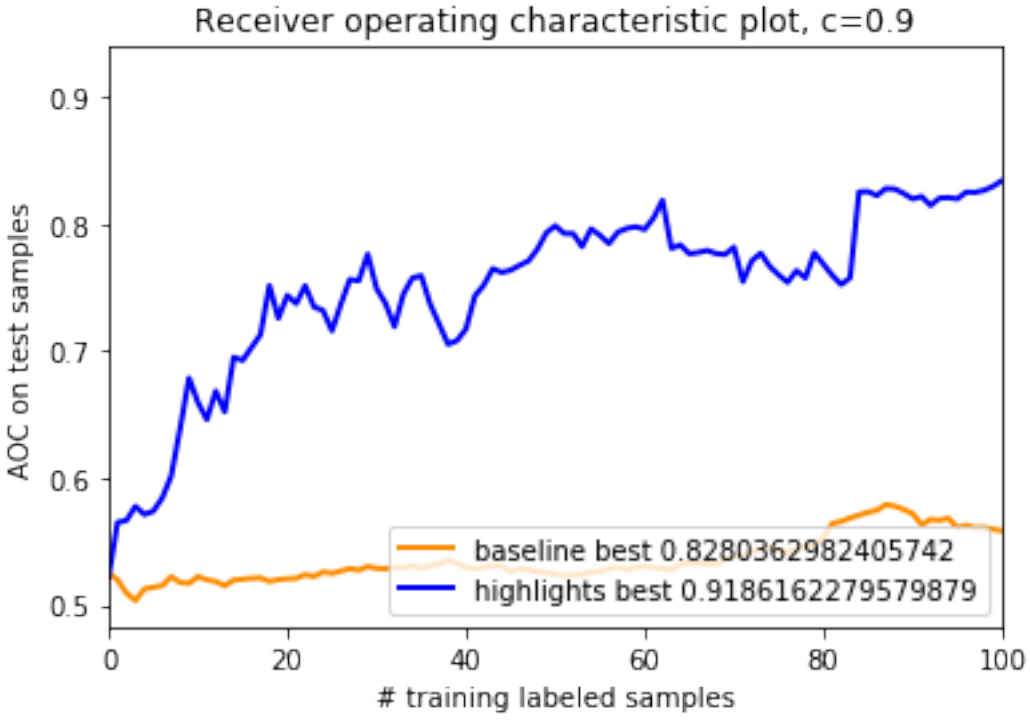

Receiver operating characteristic plot, c=0.4
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9073497640850474

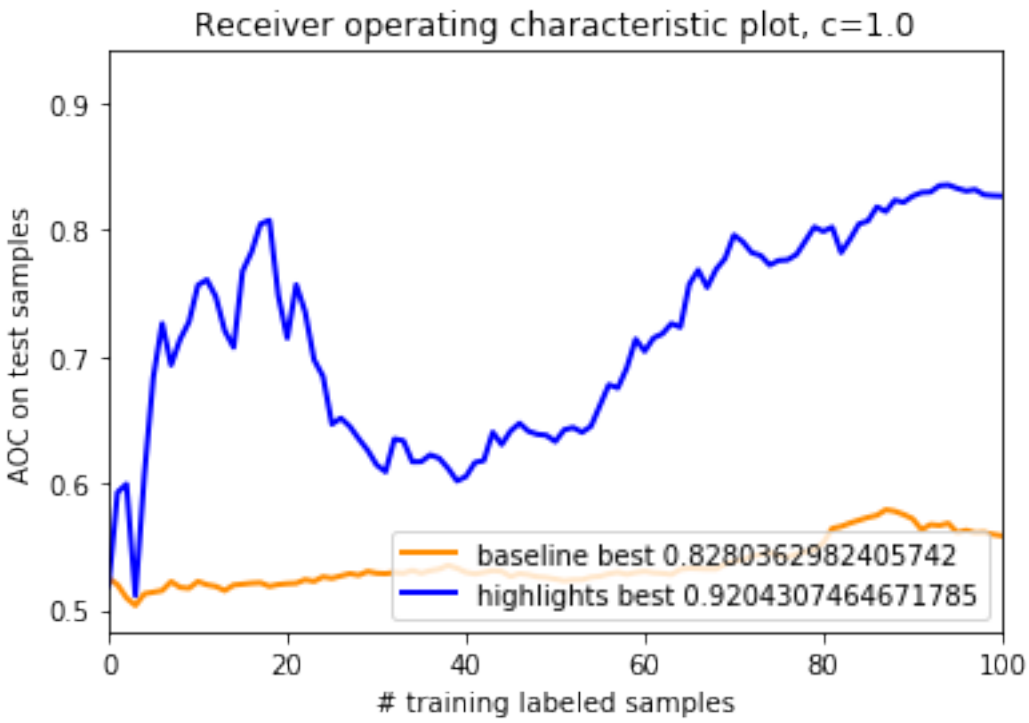

Receiver operating characteristic plot, c=0.5
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9063577013737767


Receiver operating characteristic plot, c=0.6
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9126780183931025
0.5
0.6
0.7
0.8
0.9
0
20
40
60
80
100


Receiver operating characteristic plot, c=0.7
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9160858974409425
0.5
0.6
0.7
0.8
0.9
0
20
40
60
80
100


Receiver operating characteristic plot, c=0.8
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9143382772502431
0.5
0.6
0.7
0.8
0.9
0
20
40
60
80
100


Receiver operating characteristic plot, c=0.9
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9186162279579879
0.5
0.6
0.7
0.8
0.9
0
20
40
60
80
100


Receiver operating characteristic plot, c=1.0
AOC on test samples
training labeled samples
baseline best 0.8280362982405742
highlights best 0.9204307464671785
0.5
0.6
0.7
0.8
0.9
0
20
40
60
80
100

In [ ]: