

Exercise 1:

This is not for distribution for the students. Do the following:

- Use pi-1 to go through the algorithm to draw a ROC curve and compute AUC. Do this in the plenum on the white board
- Distribute a couple of flip charts in the room, hand out markers and for each group one of the tables pi2, pi3, pi4
- Let them draw the ROC curve and compute the AUC
- Pin 1 of each at white board and compare the 4 settings in the plenum. Ask additional questions such as: Which effect does data imbalance have (in train or test, resp.)? Is an AUC below 0.5 bad? How to choose best threshold now?

y	pi_1
1	0.99
1	0.60
1	0.95
1	0.70
0	0.80
0	0.10
0	0.30

y	pi_2
1	0.10
1	0.05
1	0.07
1	0.15
0	0.01
0	0.08
0	0.02

y	pi_3
1	0.01
1	0.40
1	0.05
1	0.30
0	0.20
0	0.90
0	0.70

y	pi_4
1	0.7
1	0.9
1	0.2
1	0.8
0	0.5
0	0.1
0	0.3