

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.)? What happens if each of these points stands for 10 points? 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