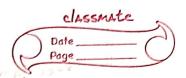
-> Accuracy = TP+TN __ 60+79 = 0.93 60+79+7+4 ace -> Misclassification (morrect ex predictors) -> True Positive Rate (TPR)/ Sensitivity = TP _ 79 0.92 how sensitive my class positive samples (TP+FN) 79+7 (66) from 86 samples; how many were guessed correctly. -> False Positive Rate (FPR)/False Alarm = FP _ 4 _ 0.06 TN+FD 60+4 Actual negative samples (64) out of actual negative classes, how many times we predicted we when we divide our data, our test set/ data set may get biased. Biasness -> what if our selection of validation / test set is biased, what happens to our model during training? what happens to our estimate of accuracy? -> TRUE negative raile (INR)/specificity = TN = 60 - 0.94 TN+FP GOTY > False weg rate (FNR) = FN = 7 0.08 7P+FN 79+7 chech: FPR=1-TNR=1-specificity



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| | Pre cision = 7P 79 _ 0.95 | | | | | | | | | | |
| | TP+ FP 79+4 | | | | | | | | | | |
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| | Recall = TP _ 79 _ 0.92 and given the chasses | | | | | | | | | | |
| | TP+FN 79+7 | | | | | | | | | | |
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| У | -> screening for a terminal disease. | | | | | | | | | | |
| 2. | DO NOT want to mise anyone, low false negative, | | | | | | | | | | |
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| | -> Automatic bombing on detecting a target from a drone. | | | | | | | | | | |
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| | CC (safe) CE (Bombs) false tve most | | | | | | | | | | |
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| | · Should not hort civilians: Zero false akarms) | | | | | | | | | | |
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CIASSMATE Precision us Recall Tradeoff' Extension to moiti- class classifier - confirmatrix scikit -> confusion moutrix diagonal values -> correctly classified P.PT 4=1497 Classification Threshold -> A classification threshold (also called the decision threshold) is a value that determines how the model assigns data points to one of the 2 classes 184 EN 1947 -> A value above the threshold indicates "class" below egals Lindon of the ciclasso!") -) It is tempting to assume that the classification threshold should always be 0.5, but thresholds are problem- dependent & .. values that you must time, Classifying Diseases sould be predicted advanced (8) 523 TN, FN - FP, TP-Precision = TP _ 7 0.77 godie az kon TP+ FP 107+2 100 + 100 + 100 + 1000+2 Recall = IP = 7 = 0:63 7P+FN91 +207+4, 20752 100 28 1750 Inc class threshold; Precision: B.gs YAMA. recall: 0.54 Del class threshold; precision: 0.70 relate: 0.8

| * | Confusion martrix |
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| | 3x3 matrix |
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| | (0,0) -> 13 elements that belong to 0 and gre |
| , li | actually predicted as o |
| | (0,2) -> 0 elements that were actually labelled as |
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| | the entire ROC curve (calculus) from (0,0) to (1,1). | | | | | | | | | | |
| | > An excellent model has AUC near to the 1; which | | | | | | | | | | |
| - | means it has a good measure of seperability. | | | | | | | | | | |
| _ | > A poor model has an AUC near o which means it | | | | | | | | | | |
| | has the worst measure of seperability. | | | | | | | | | | |
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| / | some illustrations. | | | | | | | | | | |
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