

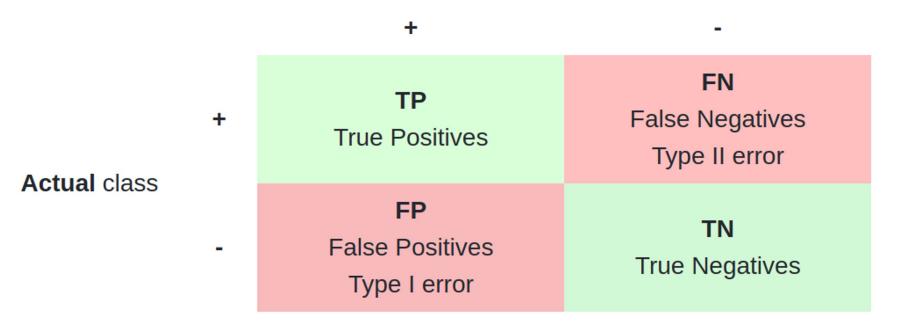
# MÉTRICAS

## Métricas



## Métricas de classificação – Matriz de Confusão

#### **Predicted** class







## Métricas de classificação

Metric	Formula	Interpretation	
Accuracy	$\frac{\mathrm{TP} + \mathrm{TN}}{\mathrm{TP} + \mathrm{TN} + \mathrm{FP} + \mathrm{FN}}$	Overall performance of model	
Precision	$\frac{\mathrm{TP}}{\mathrm{TP}+\mathrm{FP}}$	How accurate the positive predictions are	
Recall Sensitivity	$\frac{\mathrm{TP}}{\mathrm{TP} + \mathrm{FN}}$	Coverage of actual positive sample	
Specificity	$\frac{\mathrm{TN}}{\mathrm{TN}+\mathrm{FP}}$	Coverage of actual negative sample	
F1 score	$\frac{2\mathrm{TP}}{2\mathrm{TP}+\mathrm{FP}+\mathrm{FN}}$	Hybrid metric useful for unbalanced classes	

### Métricas



## **ROC**

 A receiver operating curve, também chamada de ROC, é a plotagem de TPR versus FPR variando o limite.

Metric	Formula	Equivalent
True Positive Rate TPR	$\frac{\mathrm{TP}}{\mathrm{TP} + \mathrm{FN}}$	Recall, sensitivity
False Positive Rate FPR	$\frac{\mathrm{FP}}{\mathrm{TN}+\mathrm{FP}}$	1-specificity

### Métricas



## **ROC**

• AUC (Area Under Curve) é a área abaixo da ROC

