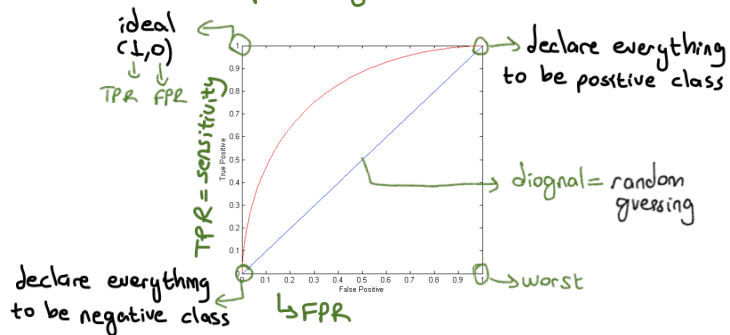


## class imbalance problem

- evaluation measures such as accuracy are not well-suited for imbalanced class

ROC (receiver operating characteristic) = metric developed for analyzing noise in signals



$$TPR = \frac{TP}{TP + FN} \quad \text{if } \textcircled{1} \rightarrow \text{no false negative}$$

↳ ideal

$$FPR = \frac{FP}{FP + TN} \quad \text{if } \textcircled{0} \rightarrow \text{no false positive}$$