

CONFUSION MATRIX

True values

| | | 1 | 0 |
|------------------|---|----|----|
| Predicted values | 1 | TP | FP |
| | 0 | FN | TN |

$$\text{Accuracy} : (TP + TN) / (TP + TN + FP + FN)$$

$$\text{Precision} : TP / (TP + FP)$$

$$\text{Recall} : TP / (TP + FN)$$

$$\text{f1 score} : 2 * (P * R) / (P + R)$$

$$\begin{aligned} \text{H.M.}(P, R) &= \frac{2}{\frac{1}{P} + \frac{1}{R}} \\ &= \frac{2}{\frac{R + P}{PR}} \\ &= \frac{2 * PR}{P + R} \end{aligned}$$