

Quiz 9

Actual	Predicted
N	N
P	P
P	N
P	P
N	P
N	N
N	P
P	N
P	P
P	P

/ FN
 / TP /
 / FP /
 / TP /
 / FP /
 / TN /
 / FN /
 / FP /
 / TP /
 / TP /

Predicted Actual	C ₁	-C ₁
C ₁	(TP) (TP) (TP) (TP)	(TN)
-C ₁	(FP) (FP) (FP)	(FN) (FN)

$$\text{Accuracy} = (TP + TN) / \text{All}$$

$$= 0.6$$

$$P = \text{Precision} = \frac{TP}{TP + FP} = \frac{4}{6} = 0.667$$

$$R = \text{Recall} = \frac{TP}{TP + FN} = \frac{4}{6} = 0.667$$

$$\text{Sensitivity} = \widehat{TP} / P = \frac{4}{6} = 0.667$$

$$\text{Specificity} = TN / N = \frac{2}{4} = 0.5$$

(F-measure) when $\beta = 1$

$$\begin{aligned} F_1 &= \frac{2PR}{P+R} = \frac{0.49}{1.34} \\ &= 0.667 \end{aligned}$$