

ALGORITHM

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

$$\text{Sensitivity} = TP/(TP+FN)$$

$$\text{Specificity} = TN/(TN+FP)$$

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

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

$$\text{Prevalence} = (TP+FP)/(TP+FP+TN+FN)$$

$$\text{Detection Rate} = TP/(TP+FP+TN+FN)$$

$$\text{Detection Prevalence} = (TP+FN)/(TP+FP+TN+FN)$$

$$\text{Balanced Accuracy} = (\text{sensitivity} + \text{specificity})/2$$

$$\text{PPV} = (\text{sensitivity} * \text{prevalence}) / ((\text{sensitivity} * \text{prevalence}) + ((1 - \text{specificity}) * (1 - \text{prevalence})))$$

$$\text{NPV} = (\text{specificity} * (1 - \text{prevalence})) / (((1 - \text{sensitivity}) * \text{prevalence}) + ((\text{specificity} * (1 - \text{prevalence})))$$

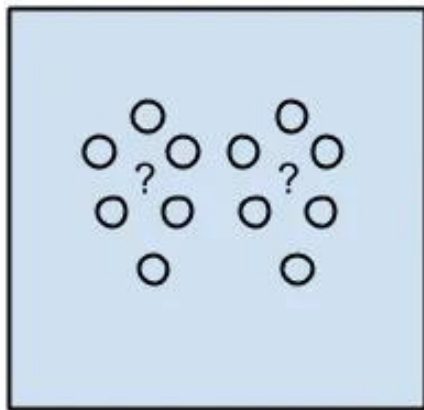
$$\text{F1} = (1 + \beta^2) * \text{precision} * \text{recall} / ((\beta^2 * \text{precision}) + \text{recall})$$

Burada beta = 1 alınır.

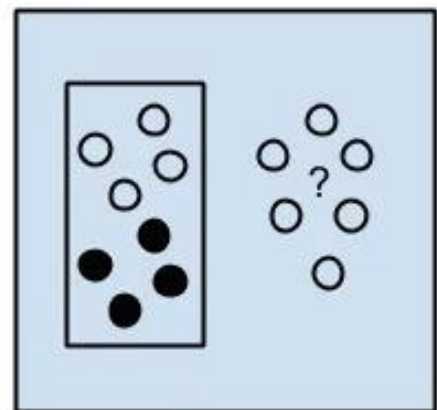
A			B			C		
TP=63	FP=28	91	TP=77	FP=77	154	TP=24	FP=88	112
FN=37	TN=72	109	FN=23	TN=23	46	FN=76	TN=12	88
100	100	200	100	100	200	100	100	200
TPR = 0.63			TPR = 0.77			TPR = 0.24		
FPR = 0.28			FPR = 0.77			FPR = 0.88		
PPV = 0.69			PPV = 0.50			PPV = 0.21		
F1 = 0.66			F1 = 0.61			F1 = 0.22		
ACC = 0.68			ACC = 0.50			ACC = 0.18		

These are calculated performance metrics. These metrics reflect the positive/negative effects of the algorithm on certain graphs.

enables progress.



Unsupervised Learning Algorithms



Supervised Learning Algorithms