Train In Data

Accuracy

Accuracy

- Percentage or fraction of correct predictions
- Fraction of the predictions that the model got right.

$$Accuracy = \frac{Number\ of\ correct\ predictions}{Total\ number\ of\ predictions}$$

- For binary classification:

$$Accuracy = \frac{TP+TN}{Total\ number\ predictions}$$

Accuracy

- For imbalanced data-sets, accuracy is **not an appropriate metric** since it does not distinguish between the numbers of correctly classified examples of different classes.

- The minority class has very little impact on the accuracy as compared to that of the majority class

Accuracy

Target	Prediction
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
1	0

$$Accuracy = \frac{9}{10} = 0.9 = 90\%$$

Baseline detection: predict majority class

The accuracy ~ the balancing ratio

- If 1 of 10 observations is positive = Acc = 90%
- If 1 of 100 observations is positive = Acc = 99%
- If 1 of 1000 observations is positive = Acc = 99.9%

Accuracy

Target	Prediction
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
1	0

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THANK YOU

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