

- For many real world applications, error or accuracy is not great measure to try to understand whether classifier is doing the right thing for you.
- Precision: Fraction of positive predictions that are actually positive.
- Recall: Fraction of positive data predicted to be positive.

- True positive: The truth is positive and the predict is positive.

True negative: The true label is -1, the prediction is -1.

False negative: A truly positive review, but the predicted is negative.

False positive: The true label is -1, but the prediction is +1.

- Precision – Formula

$$Precision = \frac{\# \text{ true positives}}{\# \text{ true positives} + \# \text{ false positives}}$$

- Recall – Formula

$$Recall = \frac{\# \text{ true positives}}{\# \text{ true positives} + \# \text{ false negatives}}$$