

MACHINE LEARNING

1. Which of the following methods do we use to find the best fit line for data in Linear Regression?
A) Least Square Error
2. Which of the following statements is true about outliers in linear regression?
A) Linear regression is sensitive to outliers
3. A line falls from left to right if a slope is _____?
B) Negative
4. Which of the following will have symmetric relation between dependent variable and independent variable?
B) Correlation
5. Which of the following is the reason for over-fitting?
A) High bias and high variance
6. If output involves label then that model is called as:
B) Predictive model
7. Lasso and Ridge regression techniques belong to _____?
A) Cross validation
8. To overcome an imbalance dataset, which technique can be used?
D) SMOTE
9. The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses _____ to make a graph?
A) TPR and FPR
10. In AUC curve Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.
B) False
11. Pick the feature extraction from below:
A) Construction bag of words from a email B) Apply PCA to project high dimensional data C) Removing stop words D) Forward selection
12. Which of the following is true about the Normal Equation used to compute the coefficient of the Linear Regression?
B) It becomes slow when the number of features is very large.

13. Explain the term regularization?

Regularization is a technique to prevent the model from overfitting by adding extra info in it. Sometimes the ML model performs well with training data but does not perform well in test data.

14. Which particular algorithms are used for regularization?

- a. Ridge Regression
- b. LASSO

15. Explain the term error present in linear regression equation?

Standard error in regression also known as the standard error of estimate represents the average distance that the observed values fall from the regression line.