• MACHINE LEARNING

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

- We do not have to choose the learning rate.
- It becomes slow when number of features is very large.
- We need to iterate.

13. Explain the term regularization?

Regularization is used to calibrate the linear regression models in order to minimize the adjusted loss function and prevent overfitting or underfitting.

14. Which particular algorithms are used for regularization?
    - LASSO
    - RIDGE

15. Explain the term error present in linear regression equation?
    The error term in a model sometimes known as the error of prediction or the disturbance, often denoted in equation with the Greek letter epsilon, expresses the difference between the actual outcome variables and the outcomes variables predicted by the statistical model.

This entry introduces error terms and discusses the assumptions underpinning error terms in different statistical models.