

Machine Learning Assignments-

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 statement 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 _negative
4. Which of the following will have symmetric relation between dependent variable and independent variable= Correlation.
5. Which of the following is the reason for over fitting condition=C-Low bias and high variance
6. If output involves label then that model is called as:= B) Predictive modal
7. Lasso and Ridge regression techniques belong to=D=Regularization
8. To overcome with 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 graph=C=) Sensitivity and Specificity
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=A&B=Construction bag of words from a email&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?=A,B&C
13. . Explain the term regularization?

Answer= Regularization is of two types L1 regularisation and L2 regularisation L2 is also called as ridge regularisation and L1 is called as a LASSO regularisation

When the model is overfit and underfit so we want to apply regularisation for symmetrical model or to increase the accuracy of model and to adjusted loss function

In case of underfitting the training data and test data both are not given a correct output or model is not trained perfectly and in overfitting scenario the training of model is in this way that model compatible very much with training data but not with testing data points so there is again less accuracy we get to minimise these points we do regularisation to fit the model.

14. which particular algorithms are used for regularization?

Answer- Lasso Regression I,e L1 and ridge regression I,e L2 regularization and elastic net regression.

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

Answer=the Error is a term which is actual residual value when there is relationship built between dependant and independent variables the remaining value is a error. It does not fully represent the actual relationship between dependant and independent variables.