FlipRobo

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Project- MACHINE LEARNING

Q1) Which of the following methods do we use to find the best fit line for data in Linear Regression?

A) Least Square Error

B) Maximum Likelihood

C) Logarithmic Loss

D) Both A and B

A1) D) Both A and B

Q2) Which of the following statement is true about outliers in linear regression?

A) Linear regression is sensitive to outliers

B) linear regression is not sensitive to outliers

C) Can't say

D) none of these

A2) A) Linear regression is sensitive to outliers

Q3) A line falls from left to right if a slope is _____?

A) Positive

B) Negative

C) Zero

D) Undefined

A3) B) Negative

Q4) Which of the following will have symmetric relation between dependent variable and independent variable?

A) Regression

B) Correlation

C) Both of them

D) None of these

A4) B) Correlation

Q5) Which of the following is the reason for over fitting condition?

A) High bias and high variance

B) Low bias and low variance

C) Low bias and high variance

D) none of these

A5) C) Low bias and high variance

Q6) If output involves label then that model is called as:

A) Descriptive model

B) Predictive modal

C) Reinforcement learning

D) All of the above

A6) B) Predictive modal

Q7) Lasso and Ridge regression techniques belong to _____?

A) Cross validation

B) Removing outliers

C) SMOTE

D) Regularization

A7) D) Regularization

Q8) To overcome with imbalance dataset which technique can be used?

A) Cross validation

B) Regularization

C) Kernel

D) SMOTE

A8) D) SMOTE

Q9) The AUC Receiver Operator Characteristic (AUCROC) curve is an evaluation metric for binary classification problems. It uses _____ to make graph?

A) TPR and FPR

B) Sensitivity and precision

C) Sensitivity and Specificity

D) Recall and precision

A9) A) TPR and FPR

Q10) In AUC Receiver Operator Characteristic (AUCROC) curve for the better model area under the curve should be less.

A) True

B) False

A10) B) False

Q11) Pick the feature extraction from below:

A) Construction bag of words from an email

B) Apply PCA to project high dimensional data

C) Removing stop words

D) Forward selection

A11) A) Construction bag of words from an email

Q12) Which of the following is true about Normal Equation used to compute the coefficient of the Linear Regression? choose all the correct options

A) We don't have to choose the learning rate.

B) It becomes slow when number of features is very large.

C) We need to iterate.

D) It does not make use of dependent variable.

A12) A) We don’t have to choose the learning rate.

B) It becomes slow when number of features is very large.

Q13) Explain the term regularization?

A13) Regularization is a technique used in machine learning and statistics to prevent overfitting in models. Overfitting occurs when a model learns to perform very well on the training data but doesn't generalize well to new, unseen data. In other words, the model captures noise and random fluctuations in the training data rather than the underlying patterns.

Q14) Which particular algorithms are used for regularization?

A14) There are different types of regularization techniques, and two common ones are:

1- L1 Regularization (Lasso)
2- L2 Regularization (Ridge)

Q15) Explain the term error present in linear regression equation?

A15) In the context of linear regression, the term "error" refers to the difference between the predicted values of the dependent variable (target variable) by the linear regression model and the actual observed values of the dependent variable in the dataset.

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