

FlipRobo

Name-Neha Somvanshi

Batch- DS2307

Topic- 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

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

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

- A) Positive
- B) Negative
- C) Zero
- D) Undefined

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

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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

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

Q7) Lasso and Ridge regression techniques belong to_____?

- A) Cross validation
- B) Removing outliers
- C) SMOTE
- D) **Regularization**

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

- A) Cross validation
- B) Regularization
- C) Kernel
- 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

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D) Recall and precision

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

A) True

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

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.

Q13) Explain the term regularization?

A13) Regularization introduces a penalty term to the loss function that the model is trying to minimize. This penalty discourages the model from fitting the training data too closely, which helps in making the model more generalizable. Regularization is particularly useful when dealing with complex models that have many parameters or features, as these models are more prone to overfitting.

Q14) Which particular algorithms are used for regularization?

A14) L1 Regularization (Lasso)

L2 Regularization (Ridge)

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

A15) The errors provide insight into how well the linear regression model is performing. A good model will have errors that are, on average, close to zero. Large errors indicate that the model is not accurately capturing the data's variability and may not be a good fit.

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