

Name: Priti Chahuhan

Internship-32

Batch: 1845

Machine learning

1. D
2. A
3. C
4. D
5. B
6. A
7. B
8. D
- 9.
10. Random forest algorithm **avoids and prevents overfitting by using multiple trees**. The results are not accurate. This gives accurate and precise results. Decision trees require low computation, thus reducing time to implement and carrying low accuracy.
11. In Data Processing, we try to change the data in such a way that the model can process it without any problems. And Feature Scaling is one such process in which we transform the data into a better version. Feature Scaling is done **to normalize the features in the dataset into a finite range**. Min Max Scaling, Mean Normalization.
12. **The main advantages:**
 - We can use fixed learning rate during training without worrying about learning rate decay.
 - It has straight trajectory towards the minimum and it is guaranteed to converge in theory to the global minimum if the loss function is convex and to a local minimum if the loss function is not convex.
13. **Accuracy is not a good metric for imbalanced datasets.**
 - This model would receive a very good accuracy score as it predicted correctly for the majority of observations, but this hides the true

performance of the model which is objectively not good as it only predicts for one class.

14. $F\text{-Measure} = (2 * \text{Precision} * \text{Recall}) / (\text{Precision} + \text{Recall})$

15. The `fit(data)` method is used to compute the mean and std dev for a given feature to be used further for scaling. The `transform(data)` method is used to perform scaling using mean and std dev calculated using the `. fit()` method. **The `fit_transform()` method does both fits and transform.**

SQL

1. B
2. B & C
3. C
4. C
5. C
6. C
7. D
8. B
9. B
10. B
11. A **JOIN** clause is used to combine rows from two or more tables, based on a related column between them.
12. **(INNER) JOIN**: Returns records that have matching values in both tables

LEFT (OUTER) JOIN: Returns all records from the left table, and the matched records from the right table

RIGHT (OUTER) JOIN: Returns all records from the right table, and the matched records from the left table

FULL (OUTER) JOIN: Returns all records when there is a match in either left or right table
13. SQL Server is a **relational database management system, or RDBMS**, developed and marketed by Microsoft.
14. The PRIMARY KEY constraint **uniquely identifies each record in a table**. Primary keys must contain UNIQUE values, and cannot contain NULL values. A table can have only ONE primary key; and in the table, this primary key can consist of single or multiple columns (fields)
15. ETL, which stands for “**extract, transform, load**,” are the three processes that, in combination, move data from one database, multiple databases, or other sources to a unified repository—typically a data warehouse.

Statistics

1. B
2. D
3. C
4. B
5. A
6. A
7. B
8. B
9. A
10. A
11. C
12. 0.22
13. C
14. C
15. B