Knowledge Check

Knowledge Check

1

What is the purpose of feature engineering in machine learning?

A. To increase the complexity of models

B. To reduce the size of the dataset

C. To improve the performance of machine learning models by modifying or creating features

D. To visualize data patterns

Knowledge Check 1

What is the purpose of feature engineering in machine learning?

A. To increase the complexity of models

B. To reduce the size of the dataset

C. To improve the performance of machine learning models by modifying or creating features

D. To visualize data patterns

The correct answer is **C**

Feature engineering involves selecting, modifying, or creating new features from raw data to enhance machine learning model performance by making the data format more suitable for analysis.

Knowledge Check 2

Which transformation is commonly used to stabilize variance and handle skewed distributions?

A. Log transformation

B. Min-max scaling

C. Box-cox transformation

D. Square root transformation

Knowledge Check 2

Which transformation is commonly used to stabilize variance and handle skewed distributions?

A. Log transformation

B. Min-max scaling

C. Box-cox transformation

D. Square root transformation

The correct answer is **D**

Square root transformation is effective in stabilizing variance and managing skewed distributions, similar to log transformation.

Knowledge Check

3

What is the purpose of min-max scaling in feature engineering?

A. To standardize the range of features in a dataset

B. To transform categorical variables into numerical

C. To split a dataset into groups based on criteria

D. To convert input data into fixed-length hash codes

Knowledge Check

3

What is the purpose of min-max scaling in feature engineering?

A. To standardize the range of features in a dataset

B. To transform categorical variables into numerical

C. To split a dataset into groups based on criteria

D. To convert input data into fixed-length hash codes

The correct answer is **A**

Min-max scaling is a feature scaling technique used to standardize or normalize the range of independent variables or features in a dataset.