# Machine Learning (ML) solved MCQs



« Set 19 **20** of **31** Set 21 »

**476. Suppose that we have N independent variables (X1,X2 Xn) and dependent variable is Y. Now Imagine that you are applying linear regression by fitting the best fit line using least square error on this data. You found that correlation coefficient for one of its variable(Say X1) with Y is -0.95.Which of the following is true for X1?**

A. relation between the x1 and y is weak

B. relation between the x1 and y is strong

C. relation between the x1 and y is neutral

D. correlation cant judge the relationship

B.relation between the x1 and y is strong discuss

**477. We have been given a dataset with n records in which we have input attribute as x and output attribute as y. Suppose we use a linear regression method to model this data. To test our linear regressor, we split the data in training set and test set randomly. Now we increase the training set size gradually. As the training set size increases, what do you expect will happen with the mean training error?**

A. increase

B. decrease

C. remain constant

D. cant say

D.can't say discuss

**478. We have been given a dataset with n records in which we have input attribute as x and output attribute as y. Suppose we use a linear regression method to model this data. To test our linear regressor, we split the data in training set and test set randomly. What do you expect will happen with bias and variance as you increase the size of training data?**

A. bias increases and variance increases

B. bias decreases and variance increases

C. bias decreases and variance decreases

D. bias increases and variance decreases

D.bias increases and variance decreases discuss

**479. Suppose, you got a situation where you find that your linear regression model is under fitting the data. In such situation which of the following options would you consider?1. I will add more variables2. I will start introducing polynomial degree variables3. I will remove some variables**

A. 1 and 2

B. 2 and 3

C. 1 and 3

D. 1, 2 and 3

A.1 and 2 discuss

**480. Problem:Players will play if weather is sunny. Is this statement is correct?**

A. true

B. false

A.true discuss

**481. For the given weather data, Calculate probability of not playing**

A. 0.4

B. 0.64

C. 0.36

D. 0.5

C.0.36 discuss

**482. Suppose you have trained an SVM with linear decision boundary after training SVM, you correctly infer that your SVM model is under fitting.Which of the following option would you more likely to consider iterating SVM next time?**

A. you want to increase your data points

B. you want to decrease your data points

C. you will try to calculate more variables

D. you will try to reduce the features

C.you will try to calculate more variables discuss

**483. The minimum time complexity for training an SVM is O(n2). According to this fact, what sizes of datasets are not best suited for SVMs?**

A. large datasets

B. small datasets

A.large datasets

discuss

**484. What do you mean by generalization error in terms of the SVM?**

A. how far the hyperplane is from the support vectors

B. how accurately the svm can predict outcomes for unseen data

C. the threshold amount of error in an svm

B.how accurately the svm can predict outcomes for unseen data

discuss

**485. We usually use feature normalization before using the Gaussian kernel in SVM. What is true about feature normalization? 1.We do feature normalization so that new feature will dominate other 2. Some times, feature normalization is not feasible in case of categorical variables3. Feature normalization always helps when we use Gaussian kernel in SVM**

A. 1

B. 1 and 2

C. 1 and 3

D. 2 and 3

B.1 and 2

discuss

**486. Support vectors are the data points that lie closest to the decision surface.**

A. true

B. false

A.true

discuss

**487. If I am using all features of my dataset and I achieve 100% accuracy on my training set, but ~70% on validation set, what should I look out for?**

A. underfitting

B. nothing, the model is perfect

C. overfitting

C.overfitting

discuss

**488. What is the purpose of performing cross- validation?**

A. a. to assess the predictive performance of the models

B. b. to judge how the trained model performs outside the

C. c. both a and b

C.c. both a and b

discuss

**489. Suppose you are using a Linear SVM classifier with 2 class classification problem. Now you have been given the following data in which some points are circled red that are representing support vectors.If you remove the following any one red points from the data. Does the decision boundary will change?**

A. yes

B. no

A.yes

discuss

**490. Linear SVMs have no hyperparameters that need to be set by cross-validation**

A. true

B. false

B.false

discuss

**491. For the given weather data, what is the probability that players will play if weather is sunny**

A. 0.5

B. 0.26

C. 0.73

D. 0.6

D.0.6

discuss

**492. 100 people are at party. Given data gives information about how many wear pink or not, and if a man or not. Imagine a pink wearing guest leaves, what is the probability of being a man**

A. 0.4

B. 0.2

C. 0.6

**493. Linear SVMs have no hyperparameters**

A. true

B. false

B.false

discuss

**494. What are the different Algorithm techniques in Machine Learning?**

A. supervised learning andsemi-

B. unsupervised learning andtransduction

C. both a & b

D. none of the mentioned

C.both a & b

discuss

**495. can be adopted when it's necessary to categorize a large amount of data with a fewcomplete examples or when there's the need to**

A. supervised

B. semi- supervised

C. reinforcement

D. clusters

B.semi- supervised

discuss

**496. In reinforcement learning, this feedback is usually called as .**

A. overfitting

B. overlearning

C. reward

D. none of above

**497. In the last decade, many researchers started trainingbigger and bigger models, built with several different layers that's why this approach is called .**

A. deep learning

B. machine learning

C. reinforcement learning

D. unsupervised learning

discuss

A.deep learning

**498. What does learning exactly mean?**

A. robots are programed sothat they can

B. a set of data is used todiscover the

C. learning is the ability tochange

D. it is a set of data is used todiscover the

discuss

C.learning is the ability tochange

**499. When it is necessary to allow the model to develop a generalization ability and avoid a common problemcalled .**

A. overfitting

B. overlearning

C. classification

D. regression

discuss

A.overfitting

**500. Techniques involve the usage of both labeled and unlabeled data is called .**

A. supervised

B. semi- supervised

C. unsupervised

D. none of the above

discuss

B.semi- supervised

« Set 19 Set 21 »


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