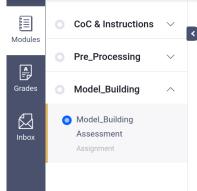
+ -× =



Model_Building Assessment

The due date for submitting this assignment has passed.

Due on 2024-04-13, 23:59 IST.

You may submit any number of times before the due date. The final submission will be considered for grading.

You have last submitted on: 2024-04-07, 18:54 IST

Click here to view the sklearn library reference

Click here to view the Colab File

Click here to view the Questions.MD file

Load the dataset.

The last column is the target column.

Last 30% rows of the dataset constitute test set and remaining rows form the training set.

Do not shuffle the dataset while splitting

You must have to use only training set to train all the estimator in questions below.

First row of the file has column names/ids, and it has no index column.

1) Which dataset are you using for this exam? Write the last two letters of the dataset file name.	0 points
Click here to view the dataset	
○ V1	
O V2	
V3	
Yes, the answer is correct. Score: 0	
Accepted Answers:	

2) Instructions (Q2-Q3)

V3

Instantiate a perceptron classifier that with following parameters:

random_state = 1729

learning rate = 1

Train for appropriate number of iterations

Do not shuffle the dataset for each iteration.

Include the intercept (bias) term.

Use 10% of the data for validation fraction.

Do not apply regularization.

Hint: one iteration of training indicates going over each sample exactly once.

Train the classifier on the training data.

Train the perceptron classifier for 5 iterations. What is value of bias (intercept) after 5th iteration?

-4

No, the answer is incorrect.

Score: 0

Accepted Answers:

(Type: Range) -6.005,-5.995

4 points

3) In continuation of the previous question, compute precision accurate upto 2 decimal places on training data for positive class (i.e. class value 1), after 5 iterations.

[Hint: Use estimator trained from the previous question]

	55	
	40	
	41	
	None of these	
No	o, the answer is incorrect.	
Sc	ore: 0	
Ac	ccepted Answers:	
41		
7)	Fit an SVM classifier with following parameters:	5 poi
	kernel='rbf'	
	decision_function_shape='ovr' random_state=1729	
	C=1	
Tra	ain the model on training data, and print the confusion matrix on test data.	
	[[1142 0] [58 0]]	
	[[1141 0] [59 0]]	
	[[1139 0] [61 0]]	
	[[1150 0] [50 0]]	
	[[1000 0] [200 0]]	
	es, the answer is correct. Here: 5	
Δα	ccepted Answers:	
	139 0] [61 0]]	
ш,		
8)	Instructions for Q8-10	5 poi
	ain a Decision Tree Classifier with the following properties:	
	criterion = 'entropy', splitter = 'random',	
	min_samples_split = 4, min_impurity_decrease = 0.0001,	
	random_state = 1729	
Wh	nat is the resultant depth of the tree?	
	18	
	20	
	21	
	24	
0		
No	o, the answer is incorrect.	
No So	o, the answer is incorrect. core: 0	
No So Ac	o, the answer is incorrect. core: 0 ccepted Answers:	
No So	o, the answer is incorrect. core: 0 ccepted Answers:	
No So Ac	o, the answer is incorrect. Accepted Answers:	
No So Ac	o, the answer is incorrect. core: 0 ccepted Answers:	5 poi

	J 010
	491
	589
	571
١	No, the answer is incorrect.
S	Score: 0
A	Accepted Answers:
5	571
1	0) What is the value of entropy at the left child of root?
(0.018
١	No, the answer is incorrect.
S	Score: 0
A	Accepted Answers:
(Type: Range) 0.0245,0.0255
	5 μ
Y	Use random state 1729 for BaggingClassifier, DecisionTreeClassifier and LogisticRegression) The metric for best performance will be the lowest 'absolute' difference in the train and test score. DecisionTreeClassifie KNeighborsClassifier LogisticRegression Yes, the answer is correct. Score: 8 Accepted Answers: LogisticRegression
	2) When the above three individual classifiers (with same settings) are used in VotingClassifier, how much absolute difference do we obtain in train and test scores? Enter your answer correct upto 4 decimal places.
0	No, the answer is incorrect.
0	No, the answer is incorrect. Score: 0
N S	