Modules
Grades
Inbox 30
Discuss
Calc

5.5 - Linear Regression on California housing Dataset
Video

AQ 5.5: Activity Question 5 - Not Graded
Assignment

Practice Assignment 5 - Not Graded
Assignment

Graded Assignment 5
Assignment

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Graded Assignment 5

The due date for submitting this assignment has passed.
Due on 2024-03-03, 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: 2024-03-03, 23:31 IST

Write a code to predict the house price of California Housing dataset using GridSearchCV.

Write your code based on the following keypoints:

Split the California housing dataset into train and test set with 70:30 ratio with

```
random_state = 1
```

.

Import StandardScaler for scaling X_train and X_test to X_train_norm and X_test_norm

```
with_mean = True
```

and

```
with_std = True
```

Import SGDRegressor with

```
random_state = 1
```

Pass SGDRegressor through GridSearchCV
Hyperparamter tuning to be done over

```
loss
```

as 'squared_error' or 'huber'

```
penalty
```

as 'l1' or 'l2'

```
alpha
```

as 0.1, 0.01, 0.001
maximum number of passes as [1000,2000,5000]
Cross Validation = 4
Train the 'model' and compute the 'score' on test data

1) Enter the value of the 'score'.(Enter your answer in four decimal places)

0.6187

No, the answer is incorrect.
Score: 0

Accepted Answers:

(Type: Range) 0.589,0.599

1 point

2) Enter the value of the best alpha obtained.

0.01

Yes, the answer is correct.
Score: 1

Accepted Answers:

(Type: Numeric) 0.01

1 point

3) Enter the value of the best maximum number of passes obtained.

1000

Yes, the answer is correct.
Score: 1

Accepted Answers:

(Type: Numeric) 1000

1 point

Write a code to predict the house price of California Housing dataset using GridSearchCV.

Write your code based on the following keypoints:

Split the California housing dataset into train and test set with 70:30 ratio with

```
random_state = 1
```

.

Import StandardScaler for scaling X_train and X_test to X_train_norm and X_test_norm

```
with_mean = True
```

and

```
with_std = True
```

Pass Ridge Regression Model through GridSearchCV
Hyperparamter tuning to be done over

```
alpha
```

as 0.5,0.1,0.05,0.01,0.005,0.001
With or without intercept
Cross Validation = 4
Train the 'model' and compute the 'score' on test data

4) Enter the value of the 'score'. (Enter your answer in four decimal places)

0.6047

No, the answer is incorrect.
Score: 0

Accepted Answers:

(Type: Range) 0.5970,0.5980

1 point

5) Enter the value of the best alpha obtained.

0.5

Yes, the answer is correct.
Score: 1

Accepted Answers:

(Type: Numeric) 0.5

1 point

Write a code to predict the house price of California Housing dataset using GridSearchCV.

Write your code based on the following keypoints:

Split the California housing dataset into train and test set with 60:40 ratio with

```
random_state = 1
```

.
Import StandardScaler for scaling X_train and X_test to X_train_norm and X_test_norm

```
with_mean = True
```

and

```
with_std = True
```

Pass Lasso Model through GridSearchCV
Hyperparamter tuning to be done over

```
alpha
```

as 0.5,0.1,0.05,0.01,0.005,0.001
With or without intercept
Cross Validation = 6
Train the 'model' and compute the 'score' on test data

6) Which of the following is the 'score' computed by your code? ***1 point***

- 0.60
- 0.65
- 0.81
- 0.74

Yes, the answer is correct.
Score: 1

Accepted Answers:

0.60

7) Enter the value of the best alpha obtained.

0.005

Yes, the answer is correct.
Score: 1

Accepted Answers:

(Type: Range) 0.001,0.005

1 point