



Tests, Surveys, and Pools

Tests

Test Canvas : Prep Quiz 15, Mar 20 (deadline 11:40am)

Edit Mode is: ON ?

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The Test Canvas allows you to add and edit questions, add question sets or random blocks, reorder questions, and review the test. [More Help](#)

Create Question

Reuse Question

Upload Questions

Question Settings

Description This quiz will be available until 1 hour before class on 20-Mar. You have 1 try and will get 10 minutes. After ten minutes the quiz will self submit. As a reminder, you can use all material, but communicating the questions or answers to fellow students is considered cheating. The quiz should be easy if you watched the videos and read the material.

Instructions

Total 3

Questions

Total Points 100

Select: All None Select by Type: - Question Type -

Delete

Points

Update

Hide Question Details



Points: 10

1. Either/Or: In KNN, all computations are done in the estimation phase.: In KNN, all computations are ...

Question

In KNN, all computations are done in the estimation phase.

Answer

Right

☒ Wrong

Points: 60

2. Calculated Numeric: Euclidean distance: Consider a data frame with two variables: x1 and x2. Consider a new instance wit: Consider a data frame with tw...

Success: Question edited. ✕

Question

Consider a data frame with two variables: x1 and x2. Consider a new instance with x1=1 and x2=10000.

There are two training instances. Training instance 1 has x1=4 and x2=8000. Training instance 2 has x1=20 and x2=9000.

Which instance is the 1NN (1 nearest neighbor): answer either 1 or 2? Do not standardize the variables when determining your answer.

Answer 2

Answer range +/- 0

Correct Feedback Since the values of x2 are a lot bigger than x1, the former will dictate the outcome. 9000 (vs 8000) is closer to 10000 and therefore the second instance is the 1 NN.



Points: **30**

3. Ordering: How do we make a prediction using KNN for a given new instance? Put in the right order.: How do we make a prediction u...

Question How do we make a prediction using KNN for a given new instance? Put in the right order.

Answer

Display Order

1.
Take the k training instances that are closest to the new instance

2.
Compute the Euclidean distance of that new instance with all training instances

3.
Compute the percentage of 1s in the dependent variable

4.
Retrieve the dependent variable of those nearest neighbors

Correct Order

2.
Compute the Euclidean distance of that new instance with all training instances

1.
Take the k training instances that are closest to the new instance

4.
Retrieve the dependent variable of those nearest neighbors

3.
Compute the percentage of 1s in the dependent variable

Select: **All** **None** Select by Type: **- Question Type -**

Delete

Points

Update

Hide Question Details

← **OK**