

Lesson 08 Quiz

Started: Feb 25 at 11:42am

Quiz Instructions

Predictive Analytics - Intro to Supervised Learning

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This quiz refers to **Predictive Analytics**.

You are allowed 2 attempts; your highest score will be kept. Correct answers will be shown after the 2nd attempt.

Question 1

1 pts

Run the demo script [L08-PredictiveModels.py](#) and observe how the running times of the different models differ.

Why do you think the kNN models lag compared to the models prior to them?

- ☐ The distance calculations are time-consuming.
- ☐ kNN is generally slow.
- ☐ The distance metric used is slow.
- ☒ The number of neighbors (k) was very high.

Question 2

1 pts

Why is the SVM model so time-consuming, particularly on the regression problem?

- ☐ The model was set up properly.
- ☐ The kernel used is very slow.

- ☐ The data was not properly normalized.
- ☒ SVMs are more computationally expensive in general.

Question 3**1 pts**

Would it make sense to apply polynomial features of degree 5 to a data set like the one used in the demo?

- ☐ No, as polynomial features beyond degree 2 are generally bad.
- ☐ Yes, as it would provide much better features.
- ☐ Yes, as it would yield better results.
- ☒ No, because the feature set would explode, due to the very large number of combinations that would arise, slowing down the model considerably.

Question 4**1 pts**

Why does the random forest model yield somewhat different results when you train it on the same Iris data set?

- ☐ The dataset has too few data points.
- ☐ Random forest is a stochastic model.
- ☒ The dataset has too few features.
- ☐ No-one knows for sure.

Question 5**1 pts**

How does a feature differ from a variable?

- ☐ None of the reasons shown
- ☐ A feature is normalized
- ☐ A feature doesn't have any missing values, usually
- ☐ A feature is more information-rich
- ☒ All of the reasons shown

Quiz saved at 7:18pm

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