AdvancedLearningAlgorithms - WEEK 3 - NeuralNetworkTraining - QUIZ 1 (AdviceForApplyingMachineLearning)

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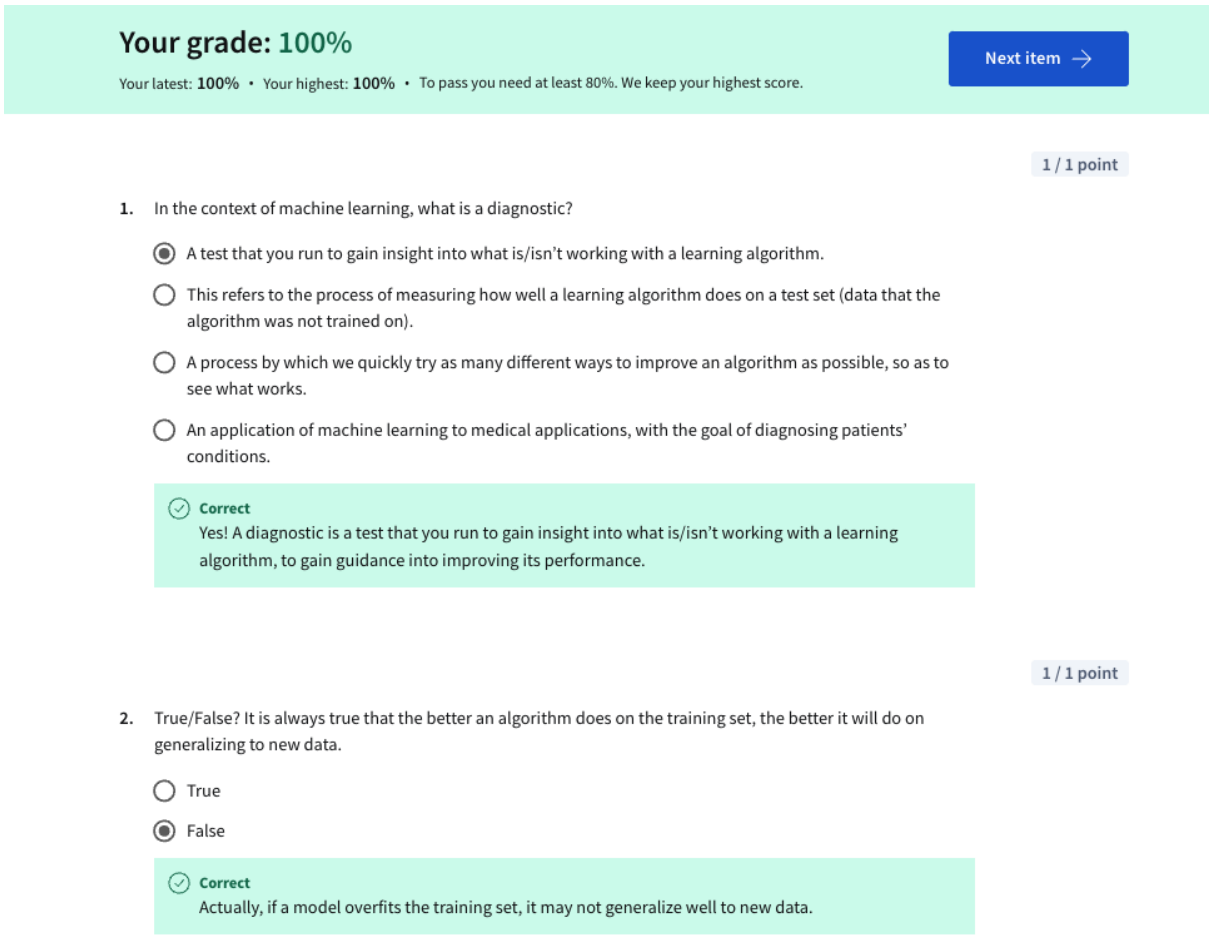


Your grade: 100%

Your latest: 100% • Your highest: 100% • To pass you need at least 80%. We keep your highest score.

Next item →

1 / 1 point

1. In the context of machine learning, what is a diagnostic?

- (●) A test that you run to gain insight into what is/isn't working with a learning algorithm.
- ( ) This refers to the process of measuring how well a learning algorithm does on a test set (data that the algorithm was not trained on).
- ( ) A process by which we quickly try as many different ways to improve an algorithm as possible, so as to see what works.
- ( ) An application of machine learning to medical applications, with the goal of diagnosing patients' conditions.

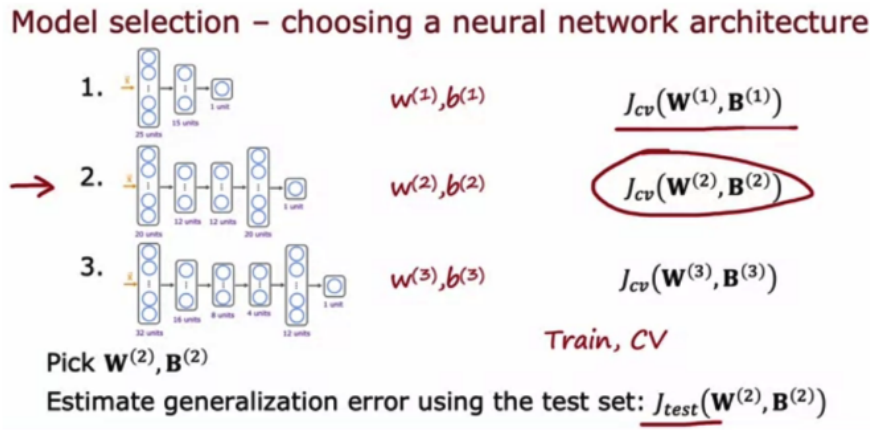
Correct
Yes! A diagnostic is a test that you run to gain insight into what is/isn't working with a learning algorithm, to gain guidance into improving its performance.

1 / 1 point

2. True/False? It is always true that the better an algorithm does on the training set, the better it will do on generalizing to new data.

- ( ) True
- (●) False

Correct
Actually, if a model overfits the training set, it may not generalize well to new data.



1 / 1 point

3. For a classification task; suppose you train three different models using three different neural network architectures. Which data do you use to evaluate the three models in order to choose the best one?

- ○ The training set
- ◉ The cross validation set
- ○ All the data -- training, cross validation and test sets put together.
- ○ The test set

✓ **Correct**
Correct. Use the cross validation set to calculate the cross validation error on all three models in order to compare which of the three models is best.