Congratulations! You passed!

Grade received 100%

Latest Submission Grade 100%

To pass 80% or higher

1/1 point

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

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.

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).

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.

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

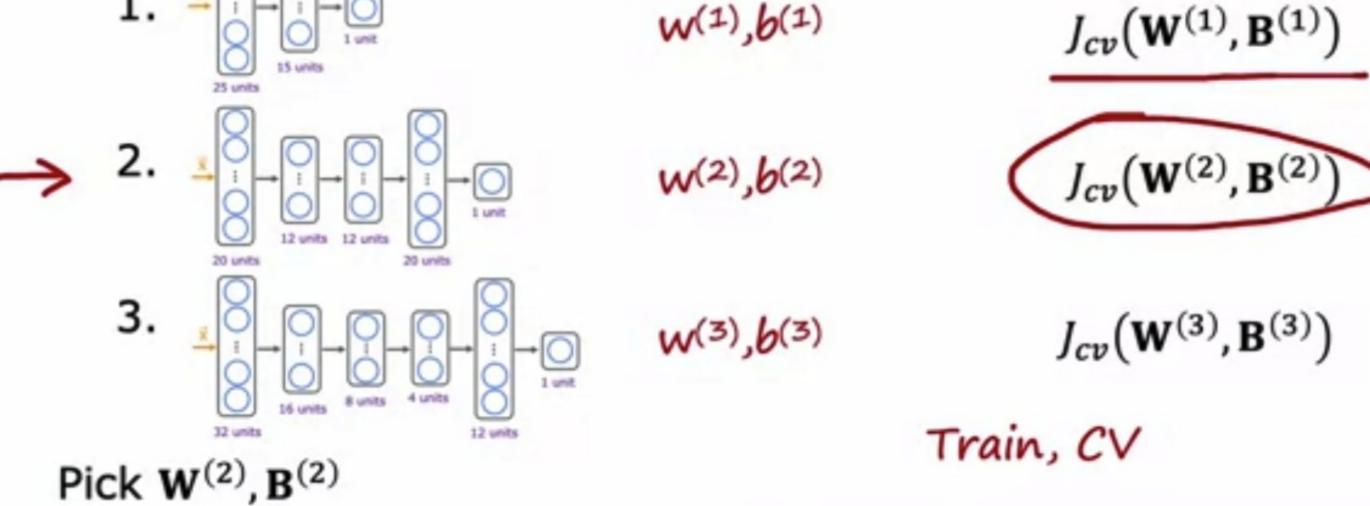
⊘ Correct

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

3. Model selection – choosing a neural network architecture

 $(\mathbf{B}^{(1)})$

1/1 point



Estimate generalization error using the test set: $J_{test}(\mathbf{W}^{(2)}, \mathbf{B}^{(2)})$

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?

O The test set

The cross validation set

O The training set

All the data -- training, cross validation and test sets put together.

⊘ 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.