Practical aspects of deep learning

Quiz, 10 questions

10/10 points (100%)

Next Item

Congratulations! You passed! 1/1 points If you have 10,000,000 examples, how would you split the train/dev/test set? 60% train . 20% dev . 20% test 98% train . 1% dev . 1% test

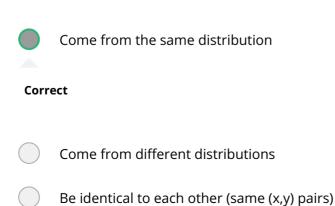


Correct

points

2.

The dev and test set should:



33% train . 33% dev . 33% test

Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions

1/1 points

3.

If your Neural Network model seems to have high variance, what of the following would be promising things to try?



Add regularization

Correct



Make the Neural Network deeper

Un-selected is correct



Increase the number of units in each hidden layer



Un-selected is correct



Get more test data



Un-selected is correct



Get more training data



Correct



1/1 points

4.

You are working on an automated check-out kiosk for a supermarket, and are building a classifier for apples, bananas and oranges. Suppose your classifier obtains a training set error of 0.5%, and a dev set error of 7%. Which of the following are promising things to try to improve your classifier? (Check all that apply.)

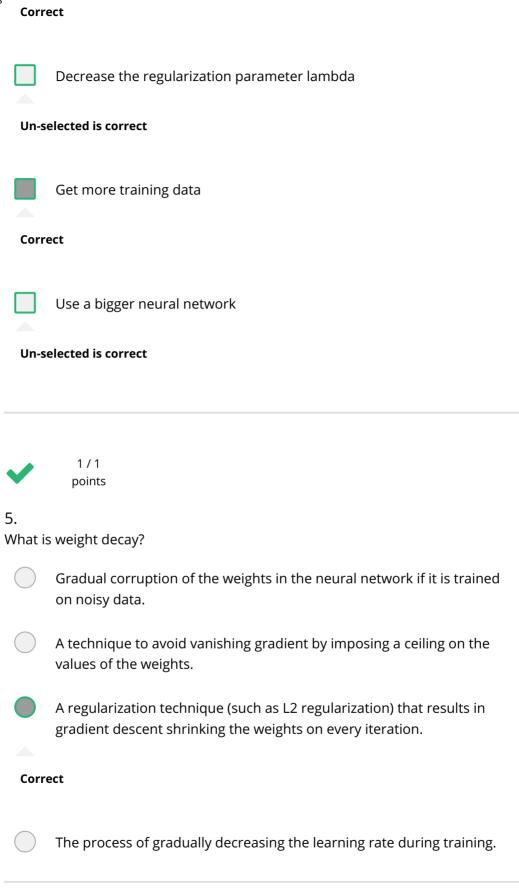


Increase the regularization parameter lambda

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10/10 points (100%)



/

1/1 points

6.

What happens when you increase the regularization hyperparameter lambda? Practical aspects of deep learning 10/10 points (100%) Quiz, 10 questions Weights are pushed toward becoming smaller (closer to 0) Correct Weights are pushed toward becoming bigger (further from 0) Doubling lambda should roughly result in doubling the weights Gradient descent taking bigger steps with each iteration (proportional to lambda) 1/1 points 7. With the inverted dropout technique, at test time: You apply dropout (randomly eliminating units) and do not keep the 1/keep_prob factor in the calculations used in training You do not apply dropout (do not randomly eliminate units), but keep the 1/keep_prob factor in the calculations used in training. You do not apply dropout (do not randomly eliminate units) and do not keep the 1/keep_prob factor in the calculations used in training Correct You apply dropout (randomly eliminating units) but keep the 1/keep_prob factor in the calculations used in training. 1/1 points 8. Increasing the parameter keep_prob from (say) 0.5 to 0.6 will likely cause the following: (Check the two that apply) Increasing the regularization effect

10/10 points (100%)

Practical aspects of deep learning Quiz, 10 questions Reducing the regularization effect Correct Causing the neural network to end up with a higher training set error **Un-selected** is correct Causing the neural network to end up with a lower training set error Correct 1/1 points Which of these techniques are useful for reducing variance (reducing overfitting)? (Check all that apply.) Data augmentation Correct **Gradient Checking Un-selected** is correct **Exploding gradient Un-selected is correct** L2 regularization

Correct

Dropout

Practical aspects of deep learning Quiz, 10 questions

iz, 10 questions

	Vanishing gradient
Un-selected is correct	
	Xavier initialization
Un-selected is correct	
~	1 / 1 points
10. Why do we normalize the inputs x ?	
	It makes it easier to visualize the data
	It makes the parameter initialization faster
	Normalization is another word for regularizationIt helps to reduce variance
	It makes the cost function faster to optimize
Correct	



