Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions



Next Item



1/1 points

1.

If you have 10,000,000 examples, how would you split the train/dev/test set?



98% train . 1% dev . 1% test

Correct

- 60% train . 20% dev . 20% test
- 33% train . 33% dev . 33% test



1/1 points

2.

The dev and test set should:



Come from the same distribution

Correct



Come from different distributions

Practical aspects of ideap learning (same (x,y) pairs)

10/10 points (100%)

Quiz, 10 questions

Have the same number of examples



1/1 points

3

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

Increase the number of units in each hidden layer

Un-selected is correct



Add regularization

Correct



Make the Neural Network deeper

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 Practical aspects of despite arnings, bananas and oranges. Suppose your 10/10 points (100%) classifier obtains a training set error of 0.5%, and a dev set error of 7%. Quiz, 10 questions Which of the following are promising things to try to improve your classifier? (Check all that apply.) Increase the regularization parameter lambda **Correct** Decrease the regularization parameter lambda **Un-selected** is correct Get more training data **Correct** Use a bigger neural network **Un-selected** is correct 1/1 points 5. What is weight decay? A technique to avoid vanishing gradient by imposing a ceiling on the values of the weights. Gradual corruption of the weights in the neural network if it is trained on noisy data. A regularization technique (such as L2 regularization) that results in gradient descent shrinking the weights on every iteration.

Correct

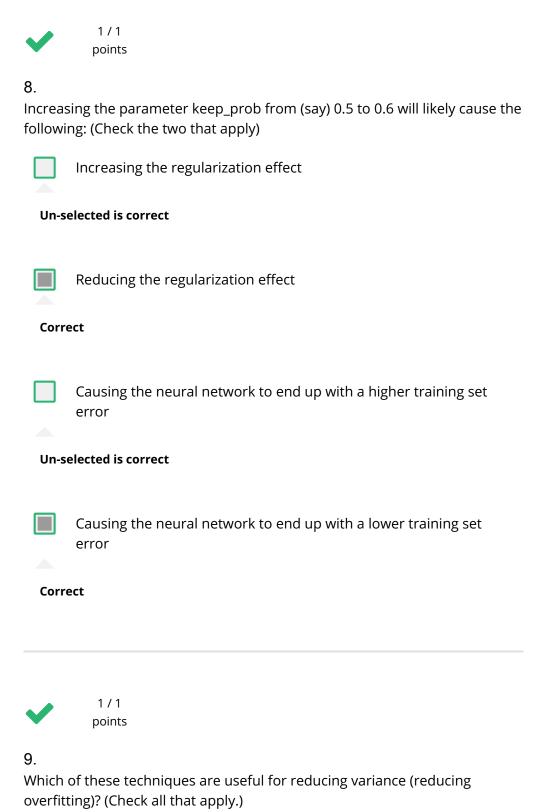
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	The process of gradually decreasing the learning rate during	
Practical	aspects of deep learning	10/10 points (100%)
Quiz, 10 questio	ns	
	1 /1	
	points	
	6. What happens when you increase the regularization hyperparameter lambda?	
	Weights are pushed 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 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 do not apply dropout (do not randomly eliminate units), but keep the 1/keep_prob factor in the calculations used in training.	
	You apply dropout (randomly eliminating units) and do not keep the 1/keep_prob factor in the calculations used in training	

You apply dropout (randomly eliminating units) but keep the 1/keep_prob factor in the calculations used in training.

Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions



L2 regularization

Correct

Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions Dropout Correct Exploding gradient **Un-selected is correct** Vanishing gradient **Un-selected is correct** Xavier initialization **Un-selected is correct Gradient Checking Un-selected is correct** Data augmentation Correct 1/1 points Why do we normalize the inputs x?

It makes the parameter initialization faster

https://www.coursera.org/learn/deep-neural-network/exam/B9JXg/practical-aspects-of-deep-learning