#### Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions

<b>~</b>	Congra	ntulations! You passed!	Next Item
	1. If you h	1 / 1 points nave 10,000,000 examples, how would you split the trai	n/dev/test
	Corre	98% train . 1% dev . 1% test	
		60% train . 20% dev . 20% test 33% train . 33% dev . 33% test	
	2. The de	1 / 1 points v and test set should:	
	Corre	Come from the same distribution	

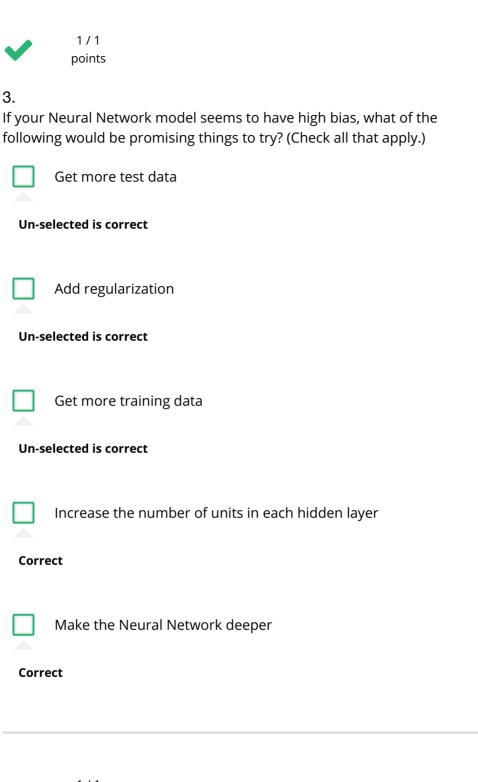
Come from different distributions

Be identical to each other (same (x,y) pairs)

# Have the same number of examples Practical aspects of deep learning

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Quiz, 10 questions





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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Quiz, 10 questions

	Decrease the regularization parameter lambda					
Un-se	Un-selected is correct					
	Get more training data					
Corre	Correct					
	Use a bigger neural network					
Un-selected is correct						
	1/1					
	points					
·.						
Vhat is	weight decay?					
	Gradual corruption of the weights in the neural network if it is trained on noisy data.					
	A technique to avoid vanishing gradient by imposing a ceiling on the values of the weights.					
	The process of gradually decreasing the learning rate during training.					
0	A regularization technique (such as L2 regularization) that results in gradient descent shrinking the weights on every iteration.					
	··					
Correct						



1/1 points

6.

## What happens when you increase the regularization hyperparameter Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions

Нанион	der gook regriim 9			
0	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)			
<b>~</b>	1 / 1 points			

7.

With the inverted dropout technique, at test time:

- 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) 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 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



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

### Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions

011-3	effected is correct					
Corre	Reducing the regularization effect					
	Causing the neural network to end up with a higher training set error					
Un-se	Un-selected is correct					
	Causing the neural network to end up with a lower training set error					
Corre	ect					
<b>✓</b>	1 / 1 points					
	of these techniques are useful for reducing variance (reducing ting)? (Check all that apply.)					
	Xavier initialization					
Un-se	elected is correct					
	Dropout					
Corre	ect					
	L2 regularization					
Corre	ect					
	Exploding gradient					

# **Un-selected is correct** Practical aspects of deep learning 10/10 points (100%) Quiz, 10 questions Data augmentation Correct **Gradient Checking Un-selected is correct** Vanishing gradient **Un-selected is correct** 1/1 points 10. Why do we normalize the inputs x? Normalization is another word for regularization--It helps to reduce variance It makes it easier to visualize the data It makes the cost function faster to optimize Correct It makes the parameter initialization faster







#### Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions