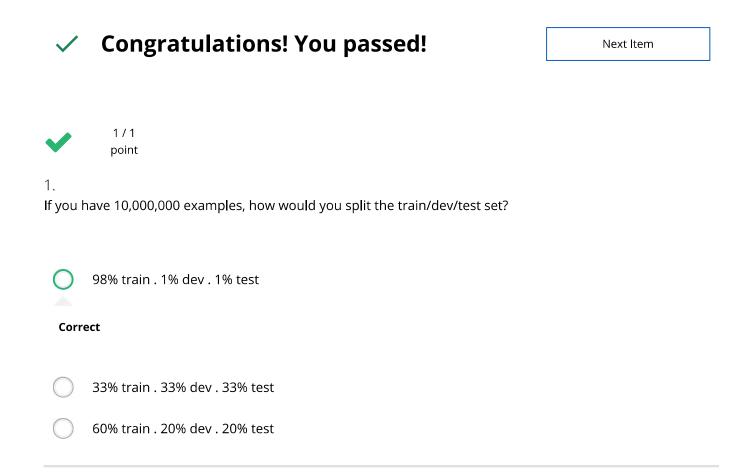
Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 questions





point

The dev and test set should:

0	Come from the same distribution
Corr	ect
	Come from different distributions

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

Practical aspects of deep learning Quiz, 10 questions

10/10 points (100%)

1/1 point		
3. If your Neural Network model seems to have high bias, what of the following would be promising things to try? (Check all that apply.)		
Make the Neural Network deeper		
Correct		
Add regularization		
Un-selected is correct		
Increase the number of units in each hidden layer		
Correct		
Get more test data		
Un-selected is correct		
Get more training data		
Un-selected is correct		
1/1 point		
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%.		

Increase the regularization parameter lambda

Which of the following are promising things to try to improve your classifier? (Check all that apply.)

Practical aspects of deep learning

10/10 points (100%)

ecrease the regularization parameter lambda ted is correct et more training data
et more training data
se a bigger neural network
ted is correct
1/1 point
eight decay?
radual corruption of the weights in the neural network if it is trained on noisy data.
e process of gradually decreasing the learning rate during training.
technique to avoid vanishing gradient by imposing a ceiling on the values of the weights.
regularization technique (such as L2 regularization) that results in gradient descent shrinking the eights on every iteration.
1

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

What happens when you increase the regularization hyperparameter lambda?

Weights are pushed toward becoming smaller (closer to 0)

Practical aspects of deep learning Quiz, 10 questions

10/10 points (10	00	%)	
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aiz, To quest	
\bigcirc	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 point
7. With th	ne 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
0	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
Corre	ect
	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.
~	1/1 point
8. Increas apply)	sing the parameter keep_prob from (say) 0.5 to 0.6 will likely cause the following: (Check the two that
	Increasing the regularization effect
Un-s	elected is correct
	Reducing the regularization effect

Practical aspects of deep learning

10/10 points (100%)

Quiz, 10 quest	tions	10/10 points (1009
	Causing the neural network to end up with a higher training set error	
Un-s	selected is correct	
Corr	Causing the neural network to end up with a lower training set error	
~	1 / 1 point	
9. Which	of these techniques are useful for reducing variance (reducing overfitting)? (Check all that Exploding gradient	at apply.)
Un-s	selected is correct	
	L2 regularization	
Corr	rect	
	Data augmentation	
Corr	rect	
	Gradient Checking	
Un-s	selected is correct	
	Xavier initialization	
Un-s	selected is correct	



10/10 points (100%)

Dropout Correct		
~	1/1 point	
10. Why d o	o we normalize the inputs x ?	
	It makes it easier to visualize the data	
0	It makes the cost function faster to optimize	
Correct		
	Normalization is another word for regularizationIt helps to reduce variance	
\bigcirc	It makes the parameter initialization faster	

