Practical aspects of deep learning Quiz, 10 questions

✓ Congratulations! You passed!

Next Item



1/1 point

1

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

- 33% train . 33% dev . 33% test
- 98% train . 1% dev . 1% test

Correct

60% train . 20% dev . 20% test



1/1 point

2.



The dev and test set should: Practical aspects of deep learning Quiz, 10 questions

0	Come from the same distribution
Corre	ect
	Come from different distributions
	Be identical to each other (same (x,y) pairs)
	Have the same number of examples
~	1/1 point
3.	
If your	Neural Network model seems to have high variance, what of the following would be promising things to try?
	Get more training data
Corre	ect
	Increase the number of units in each hidden layer

Un-selected is correct

Get more test data Practical aspects of deep learning Quiz, 10 questions Un-selected is correct
Make the Neural Network deeper
Un-selected is correct
Add regularization
Correct
1/1 point
1. 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
Correct
Decrease the regularization parameter lambda
Un-selected is correct

2018	Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization - Home Coursera
Corr	Get more training data Practical aspects of deep learning Quiz, 10 questions ect
Un-s	Use a bigger neural network elected is correct
~	1/1 point
5. Wha t i	s weight decay?
	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.
Corr	ect
	Gradual corruption of the weights in the neural network if it is trained on noisy data.

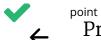


1/1 point

6.

What h	nappens when you increase the regularization hyperparameter lambda? Practical aspects of deep learning
O	Weigিষ্টে অনি pushied soward becoming smaller (closer to 0)
Corr	ect
	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 do not apply dropout (do not randomly eliminate units), but 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
Corr	ect
	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

1/1



Practical aspects of deep learning

Quiz, 10 questions

• .			1 ()		• • • • • • • • • • • • • • • • • • • •	cause the following	(CI I (I (41 4 1 1
ncrascinat	tha naramatar	vaan nro	n trom (call)	1 1 1 5 to 1 1 6	NAMII IIIZAN	I COLICA THA TAILAWINI	T' II DACK THA TW	anthat annivi
iici casiiig t	uie baranietei	KEED DIO	D 11 0111 (3av)	, 0.5 to 0.0	, vviii iikeiv	cause the following	E. ICHECK HIE LW	O triat abbivi

Increas	sing the parameter keep_prob from (say) 0.5 to 0.6 will likely cause the following: (Check the two that appl
	Increasing the regularization effect
Un-s	elected is correct
	Reducing the regularization effect
Corr	ect
	Causing the neural network to end up with a higher training set error
Un-s	elected is correct
	Causing the neural network to end up with a lower training set error
Corr	ect
×	0/1 point
9.	

Which of these techniques are useful for reducing variance (reducing overfitting)? (Check all that apply.)

Vanishing gradient

Un-s	Quiz, 10 questions
	Exploding gradient
Un-s	elected is correct
	Data augmentation
Corre	ect
	L2 regularization
Corre	ect
	Gradient Checking
Un-s	elected is correct
	Dropout
Corre	ect
	Xavier initialization
This	should not be selected



10.

Normalization is another word for regularization--It helps to reduce variance

It makes the parameter initialization faster

Why do we normalize the inputs x?

O It makes the cost function faster to optimize

Correct

It makes it easier to visualize the data





