



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
- ☐ 60% train . 20% dev . 20% test

Correct



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2. The dev and test set should:

- ☒ Come from the same distribution
- ☐ Come from different distributions
- ☐ Be identical to each other (same (x,y) pairs)
- ☐ Have the same number of examples

Correct



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.)

- ☐ Get more test data
- ☐ Get more training data
- ☒ Make the Neural Network deeper
- ☒ Increase the number of units in each hidden layer
- ☐ Add regularization

Un-selected is correct

Un-selected is correct

Correct

Correct

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

- ☒ Increase the regularization parameter lambda
- ☐ Decrease the regularization parameter lambda
- ☒ Get more training data
- ☐ Use a bigger neural network

Correct

Un-selected is correct

Correct

Un-selected is correct



1 / 1 point

5. What is weight decay?

- ☐ The process of gradually decreasing the learning rate during training.
- ☐ 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.
- ☒ A regularization technique (such as L2 regularization) that results in gradient descent shrinking the weights on every iteration.

Correct



1 / 1 point

6. What happens when you increase the regularization hyperparameter lambda?

- ☒ Weights are pushed toward becoming smaller (closer to 0)
- ☐ 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)

Correct



1 / 1 point

7. With the inverted dropout technique, at test time:

- ☐ You apply dropout (randomly eliminating 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
- ☐ 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

Correct



1 / 1 point

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
- ☒ Reducing the regularization effect
- ☐ Causing the neural network to end up with a higher training set error
- ☒ Causing the neural network to end up with a lower training set error

Un-selected is correct

Correct

Un-selected is correct

Correct



1 / 1 point

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

- ☐ Vanishing gradient
- ☒ Dropout
- ☐ Exploding gradient
- ☐ Gradient Checking
- ☒ L2 regularization
- ☐ Xavier initialization
- ☒ Data augmentation

Un-selected is correct

Correct

Un-selected is correct

Un-selected is correct

Correct

Un-selected is correct

Correct



1 / 1 point

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 regularization--It helps to reduce variance
- ☒ It makes the cost function faster to optimize

Correct