축하합니다! 통과하셨습니다!

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다음 항목으로 이동

1. If you have 10,000 examples, how would you split the train/dev/test set? Choose the best option. **1 / 1점**

- 33% train. 33% dev. 33% test.
- 98% train. 1% dev. 1% test.
- (선택) 60% train. 20% dev. 20% test.

더 보기

맞습니다
Yes. This might be considered a small data set, not in the range of big data. Thus a more classical (old) best practice should be used.

2. In a personal experiment, an M.L. student decides to not use a test set, only train-dev sets. In this case which of the following is true? **0 / 1점**

- He won't be able to measure the bias of the model.
- Not having a test set is unacceptable under any circumstance.
- He might be overfitting to the dev set.
- (선택) He won't be able to measure the variance of the model.

더 보기

틀립니다
No. Information for the bias and variance can be obtained from the train set error and the dev error.

3. If your Neural Network model seems to have high variance, what of the following would be promising things to try? 1 / 1점

더 보기

맞습니다
Great, you got all the right answers.

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.) 1 / 1점

더 보기

맞습니다
Great, you got all the right answers.

5. Which of the following are regularization techniques? 1 / 1점

- [ ] Gradient Checking.
- [x] Dropout.

Correct
Correct. Using dropout layers is a regularization technique.

- [ ] Increase the number of layers of the network.
- [x] Weight decay.

Correct
Correct. Weight decay is a form of regularization.

더 보기

맞습니다
Great, you got all the right answers.

6. The regularization hyperparameter must be set to zero during testing to avoid getting random results. True/False? 1 / 1점

- ( ) True
- (•) False

더 보기

맞습니다
Correct. The regularization parameter affects how the weights change during training, this means during backpropagation. It has no effect during the forward propagation that is when predictions for the test are made.

7. Which of the following are true about dropout? 0 / 1점

- [ ] It helps to reduce the bias of a model.
- [x] In practice, it eliminates units of each layer with a probability of 1- keep_prob.

✓ **Correct**
Correct. The probability that dropout doesn't eliminate a neuron is keep_prob.

- [ ] In practice, it eliminates units of each layer with a probability of keep_prob.
- [ ] It helps to reduce overfitting.

더 보기

틀립니다
You didn't select all the correct answers

8. Increasing the parameter keep_prob from (say) 0.5 to 0.6 will likely cause the following: (Check the two that apply) 1 / 1점

- [ ] Increasing the regularization effect
- [x] Reducing the regularization effect

✓ **Correct**

- [ ] Causing the neural network to end up with a higher training set error
- [x] Causing the neural network to end up with a lower training set error

✓ **Correct**

더 보기

맞습니다
Great, you got all the right answers.

9. Which of these techniques are useful for reducing variance (reducing overfitting)? (Check all that apply.) 1 / 1점

- [ ] Exploding gradient
- [ ] Gradient Checking
- [x] L2 regularization

✓ Correct

- [x] Dropout

✓ Correct

- [x] Data augmentation

✓ Correct

- [ ] Vanishing gradient
- [ ] Xavier initialization

더 보기

맞습니다
Great, you got all the right answers.

10. Why do we normalize the inputs x? 1 / 1점

- ( ) It makes the parameter initialization faster
- ( ) 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

더 보기

맞습니다