Go to next item

1.

1/1 point

Error analysis

 $m_{cv} = \frac{500}{5000}$ examples in cross validation set.

Algorithm misclassifies 100 of them.

Manually examine 100 examples and categorize them based on common traits.

Pharma: 21 features

Deliberate misspellings (w4tches, med1cine): 3

Unusual email routing: 7

Steal passwords (phishing): 18 more data features

Spam message in embedded image: 5

Which of these is a way to do error analysis?

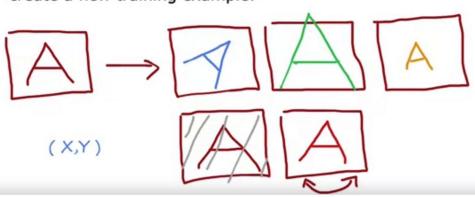
- igcup Calculating the test error J_{test}
- Ocllecting additional training data in order to help the algorithm do better.
- igcup Calculating the training error J_{train}
- Manually examine a sample of the training examples that the model misclassified in order to identify common traits and trends.
- **⊘** Correct

Correct. By identifying similar types of errors, you can collect more data that are similar to these misclassified examples in order to train the model to improve on these types of examples.

2.

Data augmentation

Augmentation: modifying an existing training example to create a new training example.



1/1 point

I ransfer learning Cats Dogs 1,000 classes People Will, bill Wil	We sometimes take an existing training example and modify it (for example, by rotating an image slightly) to create a new example with the same label. What is this process called? Machine learning diagnostic Bias/variance analysis Data augmentation Error analysis Correct Yes! Modifying existing data (such as images, or audio) is called data augmentation.	
Transfer learning Cats Dogs Cars People W(11, \(\bar{b}(11), \(\bar{b}(12), \(\bar{b}(12), \bar{b}(12), \) Option 1: only train output layers parameters. Option 2: train all parameters. What are two possible ways to perform transfer learning? Hint: two of the four choices are correct. Download a pre-trained model and use it for prediction without modifying or re-training it. You can choose to train just the output layers' parameters and leave the other parameters of the model fixed. Correct Correct. The earlier layers of the model, including the output layers, as well as the earlier layers. Correct Correct. It may help to train all the layers of the model on your own training set. This may take more time compared to if you just trained the	3.	1/1 point
Cats Dogs Cars Cars People W(1), b(1), w(2), b(2), w(3), b(3), w(4), b(4) Option 1: only train output layers parameters. Option 2: train all parameters. What are two possible ways to perform transfer learning? Hint: two of the four choices are correct. Download a pre-trained model and use it for prediction without modifying or re-training it. You can choose to train just the output layers' parameters and leave the other parameters of the model fixed. You can choose to train all parameters of the model, including the output layers, as well as the earlier layers. You can choose to train all parameters of the model, including the output layers, as well as the earlier layers. You can choose to train all parameters of the model, including the output layers, as well as the earlier layers.	Iranster learning	
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Given a dataset, pre-train and then further fine tune a neural network on the same dataset.	Given a dataset, pre-train and then further fine tune a neural network on the same dataset.	