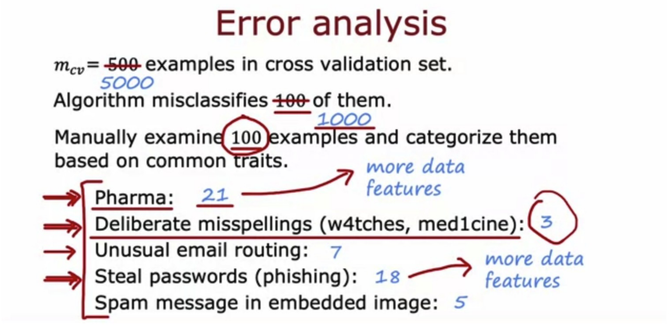
Try again once you are ready

Grade received 50% | Latest Submission Grade 50% | To pass 80% or higher

Try again

1. 0 / 1 point

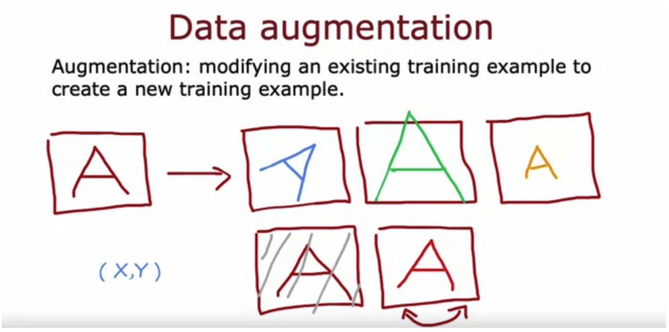


Which of these is a way to do error analysis?

- (•) Calculating the test error J_{test}
- ( ) 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.
- ( ) Collecting additional training data in order to help the algorithm do better.

✗ Incorrect
Calculating the test error is useful for determining if a model generalizes well to new examples, but in the lectures, this is not what "error analysis" refers to.

2. 1 / 1 point

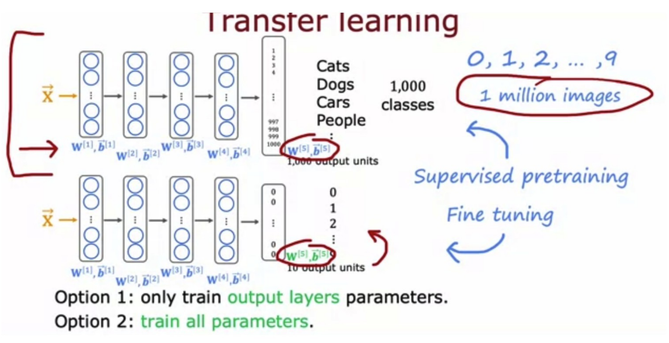


We sometimes take an existing training example and modify it (for example, by rotating an image slightly) to create a new example with the same label. What is this process called?

- ( ) Error analysis
- (•) Data augmentation
- ( ) Bias/variance analysis
- ( ) Machine learning diagnostic

✓ Correct
Yes! Modifying existing data (such as images, or audio) is called data augmentation.

3. 0.5 / 1 point



What are two possible ways to perform transfer learning? Hint: two of the four choices are correct.

- [x] Download a pre-trained model and use it for prediction without modifying or re-training it.

✗ This should not be selected
Incorrect. Transfer learning usually includes downloading the parameters of a pre-trained model, and then modifying the output layers, as well as training it on your own dataset, in order to perform the desired task. Downloading and using a model "as is", is fine if it works, but is not an example of transfer learning.

- [ ] You can choose to train all parameters of the model, including the output layers, as well as the earlier layers.
- [ ] Given a dataset, pre-train and then further fine tune a neural network on the same dataset.
- [x] 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 may be reusable as is, because they are identifying low level features that are relevant to your task.