










deeplearning.ai

Error Analysis

Cleaning up
Incorrectly labeled
data

Incorrectly labeled examples

x							
y	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	1

Training set.

The sixth example (white puppy) is highlighted with a blue box and an arrow pointing to its label '1', indicating it is an incorrectly labeled example (a dog labeled as a cat).

DL algorithms are quite robust to random errors in the training set.

Systematic errors

Error analysis

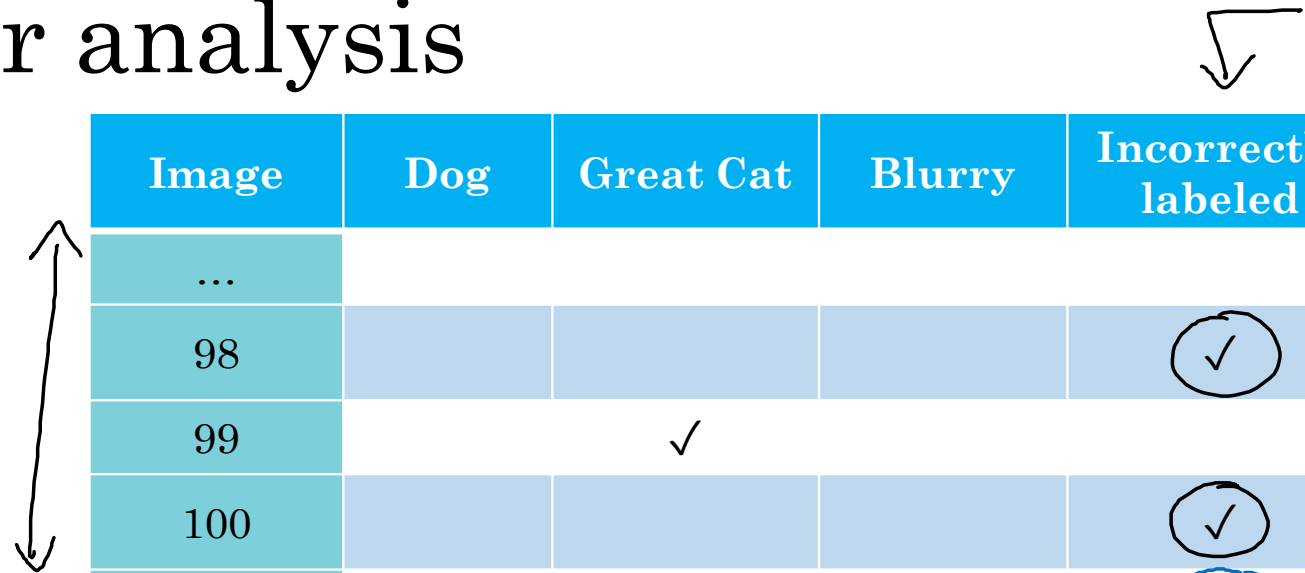



Image	Dog	Great Cat	Blurry	Incorrectly labeled	Comments
...					
98				✓	Labeler missed cat in background
99		✓			
100				✓	Drawing of a cat; Not a real cat.
% of total	<u>8%</u>	<u>43%</u>	<u>61%</u>	<u>6%</u>	



Overall dev set error 100%

Errors due incorrect labels 0.6% ←

Errors due to other causes 9.4% ←

↑

✓
20%

✓
0.6%

1.4%

2.1%

1.9%

Goal of dev set is to help you select between two classifiers A & B.

Correcting incorrect dev/test set examples

- Apply same process to your dev and test sets to make sure they continue to come from the same distribution
- Consider examining examples your algorithm got right as well as ones it got wrong. 20%
- Train and dev/test data may now come from slightly different distributions.