










deeplearning.ai

# Error Analysis

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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.

if the errors are reasonably random, then it's probably okay to just leave the errors as they are and not spend too much time fixing them.

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

Systematic errors

# Error analysis

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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>	

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Overall dev set error

Errors due incorrect labels

Errors due to other causes

100%

0.6% ←

9.4% ←

↑

2%

0.6%

1.4%

2.1%

1.9%

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

Andrew Ng

# 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.