



deeplearning.ai

# Error Analysis

---

Cleaning up  
Incorrectly labeled  
data

# Incorrectly labeled examples

x



y

1

0

1

1

0

*Training set.*

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	8%	43%	61%	6%	

Overall dev set error ..... 100% ←

Errors due incorrect labels ..... 0.6% ←

Errors due to other causes ..... 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.

# 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.  
*(8.6%)* *(20%)*
- Train and dev/test data may now come from slightly different distributions.