



deeplearning.ai

Error Analysis

Cleaning up Incorrectly labeled data

Incorrectly labeled examples

| | | | | | | | |
|---|---|---|--|---|---|---|---|
| x |  |  |  |  |  |  |  |
| y | 1 | 0 | 1 | 1 | 0 | 1 | 1 |

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

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

Errors due incorrect labels

Errors due to other causes

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.
- Train and dev/test data may now come from slightly different distributions.