



deeplearning.ai

# Error Analysis

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Carrying out error  
analysis

# Look at dev examples to evaluate ideas



90% accuracy  
→ 10% error

Should you try to make your cat classifier do better on dogs? ←

Error analysis:

- Get ~100 mislabeled dev set examples. → 5-10 min
- Count up how many are dogs.

→ 5%  
5/100

10%  
↓  
9.5%

"ceiling"

→ 50%  
50/100

10%  
↓  
5%

# Evaluate multiple ideas in parallel

Ideas for cat detection:

- Fix pictures of dogs being recognized as cats ←
- Fix great cats (lions, panthers, etc..) being misrecognized ←
- Improve performance on blurry images ←

| Image      | Dog       | Great Cats | Blurry | Instagram  | Comments         |
|------------|-----------|------------|--------|------------|------------------|
| 1          | ✓         |            |        | ✓          | Pitbull          |
| 2          |           |            | ✓      | ✓          |                  |
| 3          |           | ✓          | ✓      |            | Rainy day at zoo |
| ⋮          | ⋮         | ⋮          | ⋮      |            |                  |
| % of total | <u>8%</u> | 43%        | 61%    | <u>12%</u> |                  |