

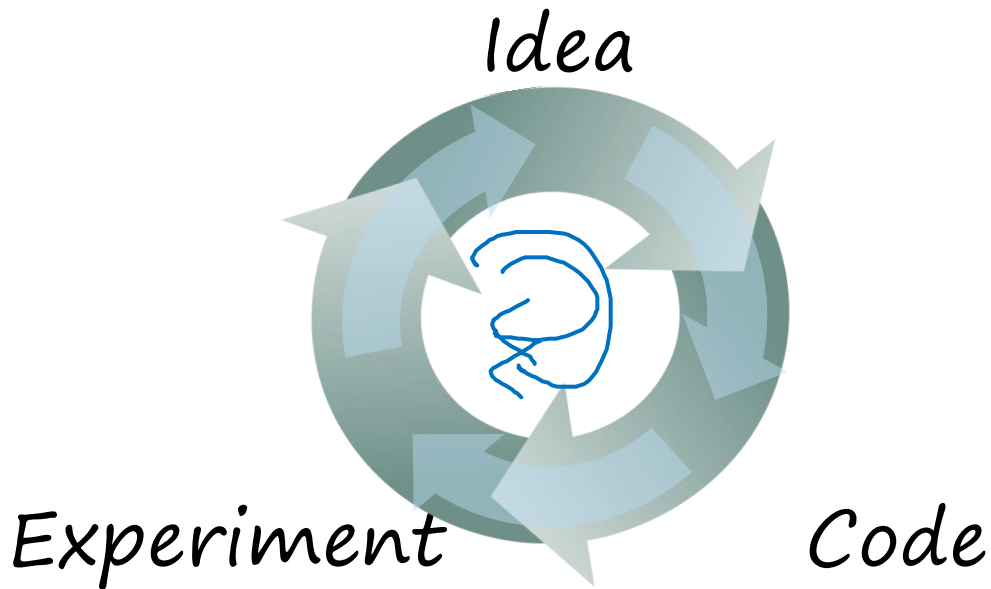


deeplearning.ai

Setting up
your goal

Single number
evaluation metric

Using a single number evaluation metric



→ Of examples recognized as cost, what % actually are costs?

→ what % of actual costs are correctly recognized

| Classifier | Precision | Recall |
|------------|-----------|--------|
| A | 95% | 90% |
| B | 98% | 85% |

F₁ score = "Average" of P and R.

$$\left(\frac{2}{\frac{1}{P} + \frac{1}{R}} \right) \text{ "Harmonic mean"}$$

Dev set + Single number evaluation metric
real speed up iterating

Another example

| Algorithm | US | China | India | Other |
|-----------|---------------------|---------------------|---------------------|----------------------|
| A | <u>3%</u> | 7% | 5% | 9% |
| C | 5% 2% | 6% 3% | 5% 4% | 10% 5% |
| D | 5% | 8% | 7% | 2% |
| E | 4% | 5% | 2% | 4% |
| F | 7% | 11% | 8% | 12% |