



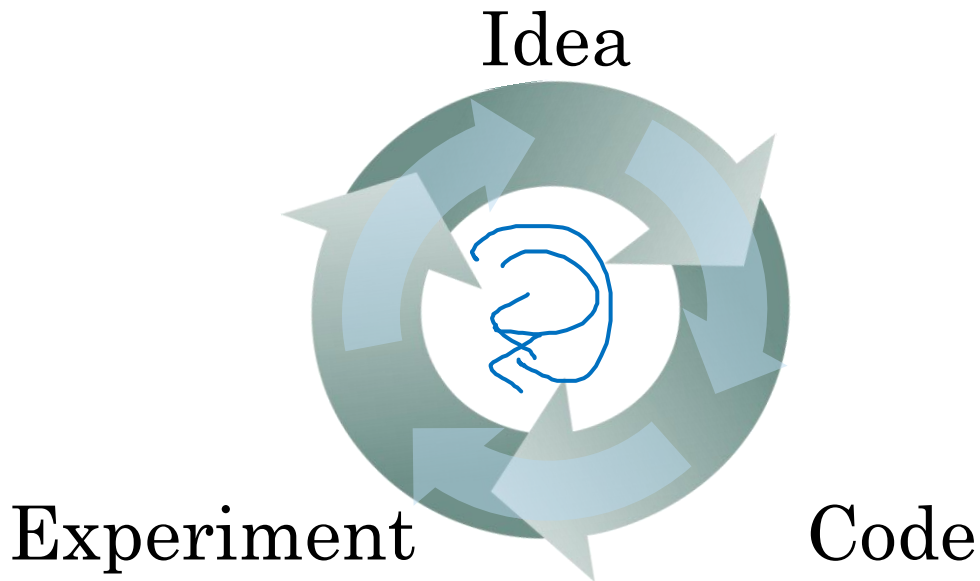
deeplearning.ai

Setting up  
your goal

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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%

F<sub>1</sub> 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%
B	5%	6%	5%	10%
C	2%	3%	4%	5%
D	5%	8%	7%	2%
E	4%	5%	2%	4%
F	7%	11%	8%	12%