



deeplearning.ai

Setting up your goal

**Satisficing and
optimizing metrics**

Another cat classification example

Classifier	Accuracy	Running time
A	90%	80ms
B	92%	95ms
C	95%	1,500ms

$$\text{Cost} = \text{accuracy} - 0.5 \times \text{Running Time}$$

maximize accuracy
 subject to Running Time \leq 100 ms.

N metrics : 1 optimizing
 N-1 satisfying

Wakewords / Trigger words

Alexa, OK Google,

Hey Siri, nihao baidu
 你好百度

accuracy.
 #false positive

maximize accuracy.
 s.t. \leq 1 false positive
 every 24 hours.