deeplearning.ai

Setting up
your goal

Satisficing and
optimizing metrics

Another cat classification example

Classifier	Accuracy *(optimizing)*	Running time *(Satisficing)*
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 ≤ 100 ms.

N metrics: 1 optimizing
N-1 satisficing

Wakewords / Trigger words

Alexa, OK Google,
Hey Siri, nihaobaidu
你好百度

accuracy.
#false positive

Maximize accuracy.
s.t. ≤ 1 false positive
every 24 hours.

Andrew Ng