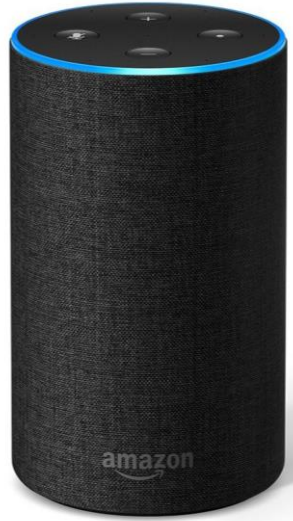deeplearning.ai

Audio data

Trigger word detection

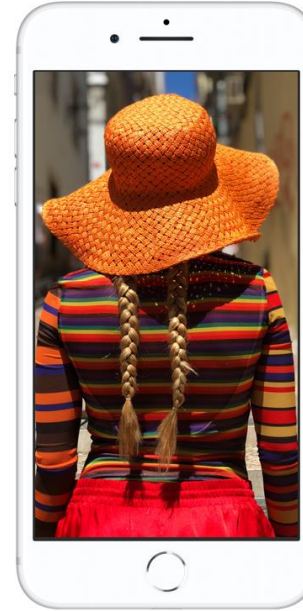# What is trigger word detection?

Amazon Echo
(Alexa)

Baidu DuerOS
(xiaodunihao)

Apple Siri
(Hey Siri)

Google Home
(Okay Google)

Andrew Ng

Trigger word detection algorithm

Now this type of labeling scheme for RNN could work, actually this work reasonably well.
One slight disadvantage of this is it creates a very imbalanced training set.
So a lot more zeros than ones.
So one other thing you could do that it's getting a little bit of hack but could make them all a little bit easy to train is instead of setting only a single time step to output 1,

$a^{<0>} \longrightarrow$

$x^{<1>}$ $x^{<2>}$ $x^{<3>}$

you can actually make an output a few ones for several times or for a fixed period of time before reverting back to zero. And that slightly even out the ratio of ones to zeros. But this is a little bit of hack.

maybe compute spectrogram features and that generates features x1 x2 x3, then you pass to an RNN.

just finishing the trigger wor

Andrew Ng