

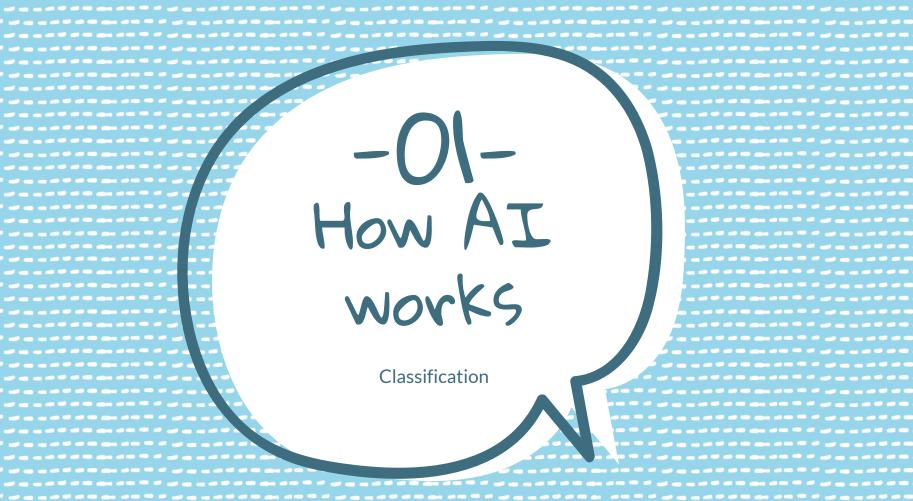
Agenda











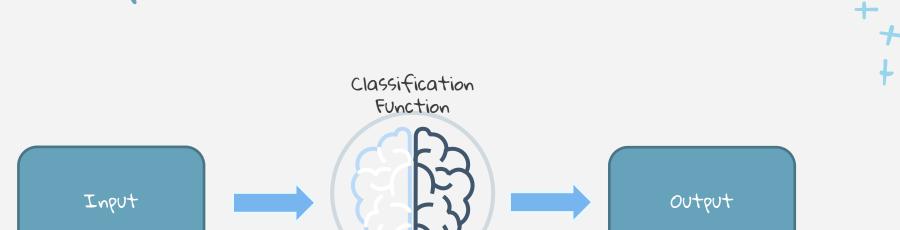
Classification

It's when a computer program takes in something and labels it.

Basically sorting



A Graphic



Inputs

Something you want the network to classify

(picture, text, numbers, etc)

Outputs

The label the network thinks matches the input





Classification Function



Output:

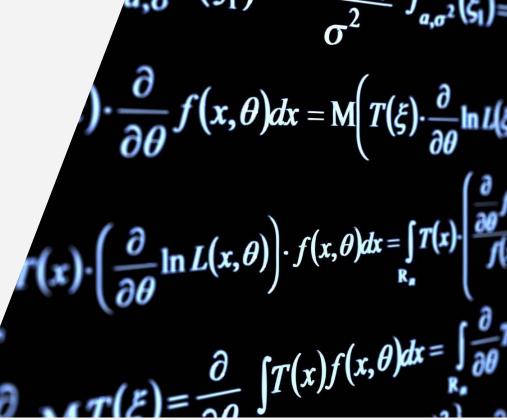
Inputs

Outputs

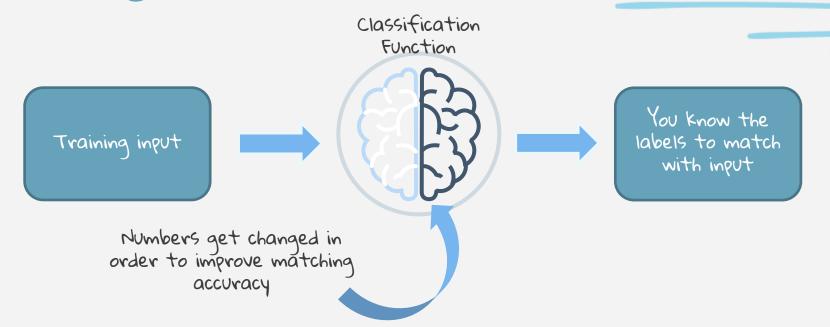
- 1. Pig
 - Lion
- 3. Not a pig or lion

The Classification Function

- A complicated math thing
- Training data changes some numbers in the math thing
- Those updated numbers are used on testing data



Training (needs tons of data)



Repeat a lot of times

Training datasets will have inputs matched with outputs so the computer can learn

How does training data affect model performance?

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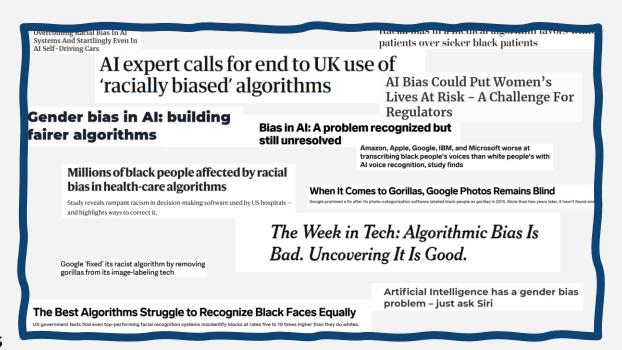
Think about positives and negatives

Bias in AI

Unbalanced training sets will mess up the classifier function.

Repetition helps us (and computers learn)

What if our pig/lion dataset had 100 pigs and 1 lion? Or vice versa?



This is a real problem

Inputs









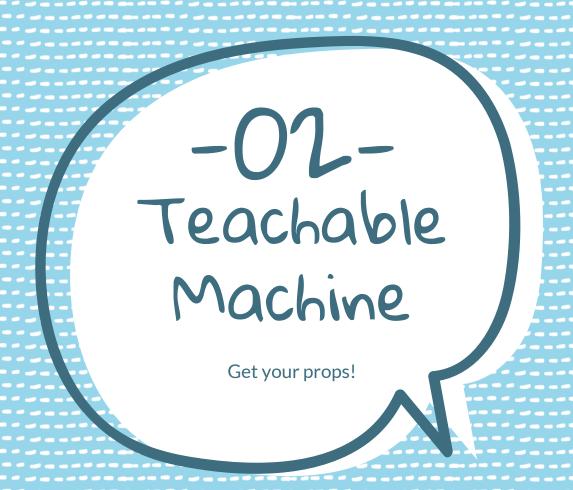




Outputs

- 1. Pig
- 2. Lion
- 3. Not a pig or lion

How might this go wrong? How could the training set mess this up?



Things to try

-01-

Make it work

-01-

Try to fool the machine

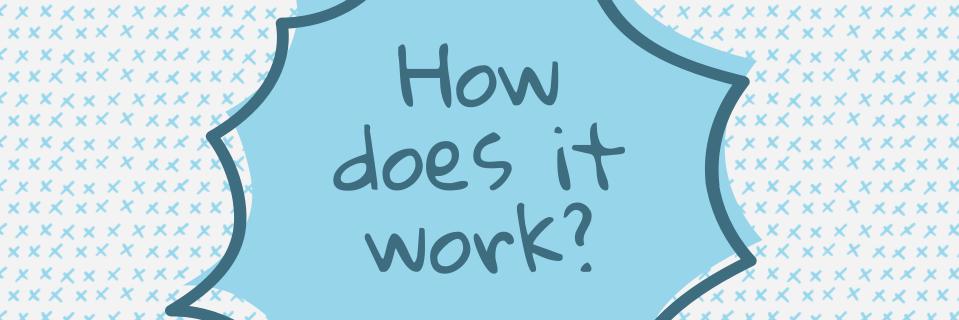
(hint: mess with the training set) -03-

Play around with the audio/pose things if you did 1 and 2





How did it go?
What'd you cook?
Was it any good?
Tell us about it



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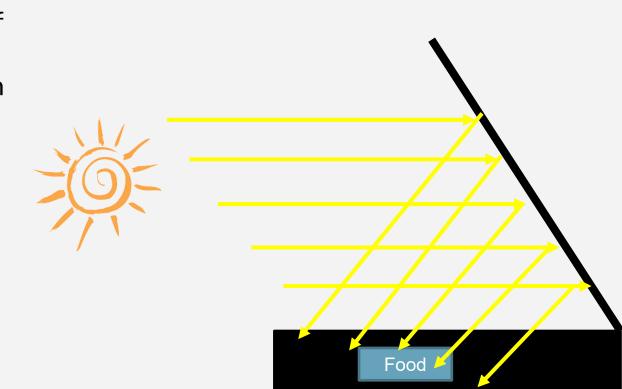
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An explanation

- 1. Sun's rays reflect off foil into the box
- 2. Heat gets trapped in the box because of black paper and plastic wrap
- 3. Food gradually warms up from heat













Thanks for < x x x x x x x x x x x x x x</p> coming!

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-Next meeting in January 2021