

ML
on the
CL

Hi!

I'm Kylie



Formidable

AGENDA

WHAT IS MACHINE LEARNING?

WHAT ARE SOME MACHINE LEARNING TYPES?

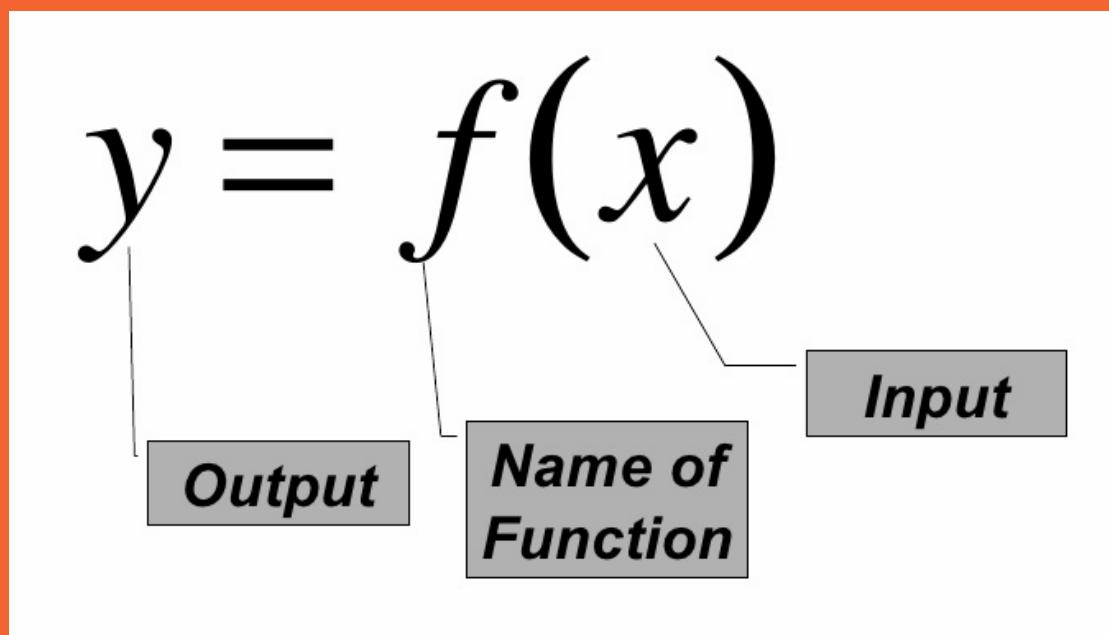
WHAT ARE SOME ADVANTAGES TO USING
JAVASCRIPT FOR ML?

=> DEMOS!

"The ability to
learn without being
explicitly
programmed."

- *Arthur Samuel*

THINK: FUNCTION NOTATION



MACHINE LEARNING
PAVES THE PATH
TO ARTIFICIAL INTELLIGENCE

TF.py

TF.js

SO MANY POSSIBILITIES





DEMO #1: YOUR OWN PERSONAL PARODY TWITTER BOT



Horse ebooks @Horse_ebooks · Sep 20, 2013

I have personally used this technique to break many memory

42

640

548



Horse ebooks @Horse_ebooks · Sep 20, 2013

AND BURNED BY UNSCRUPULOUS BUSINESSES MORE TIMES

35

977

709



Horse ebooks @Horse_ebooks · Sep 20, 2013

breath, and vice versa. How many of the common things I and others thought we were doing

14

519

437



Horse ebooks @Horse_ebooks · Sep 20, 2013

and how often they hear it.

11

233

173





Horse JS @horse_js · May 24

In case you were unaware, I'm deprecated

6

44

246



Horse JS @horse_js · May 24

my variable names rhyme. No technical reasons, doing it as an art project.

3

15

94



Horse JS @horse_js · May 23

js developers write really great semantic HTML and CSS, AS WELL AS
JavaScript, therefore they're more valuable...

1

6

47



Horse JS @horse_js · May 20

It's important to remember that CSS is designed to fail

3

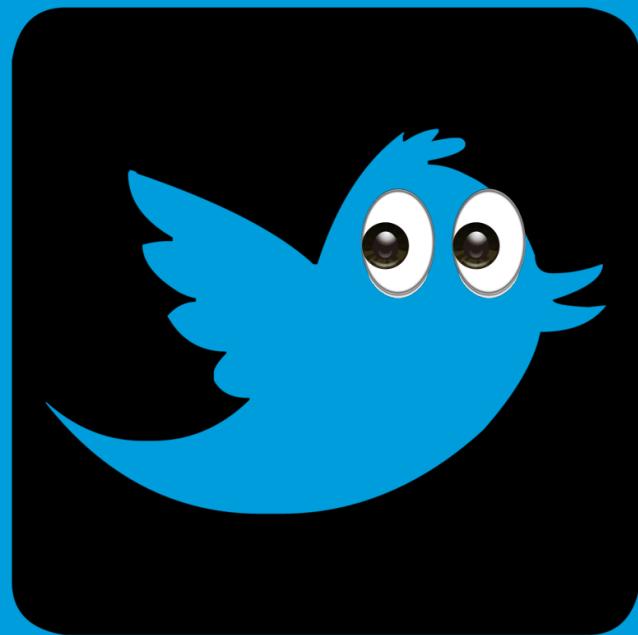
24

111



MARKOV DECISION PROCESS

A TYPE OF REINFORCEMENT LEARNING



SUPERVISED



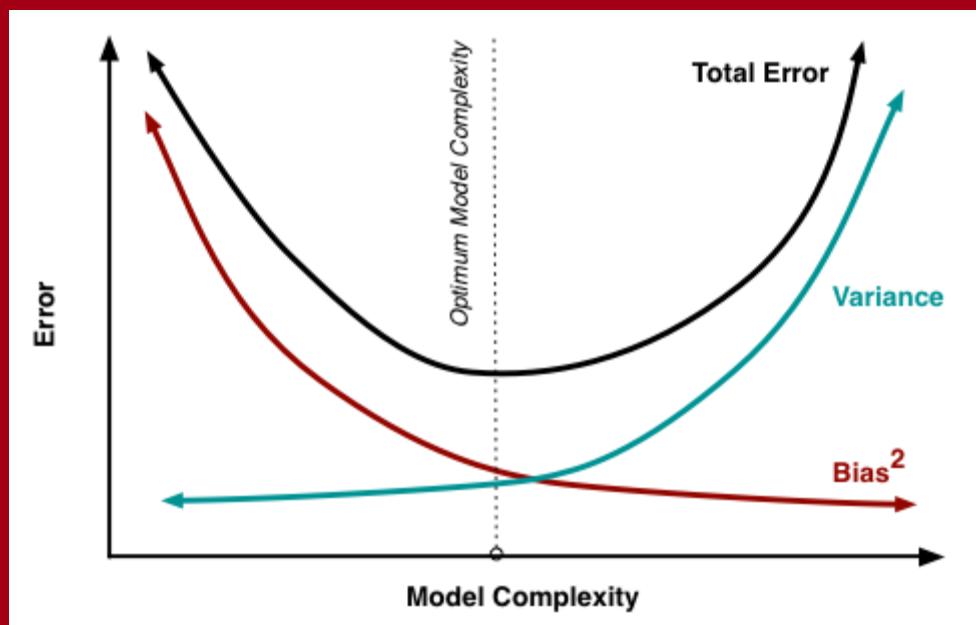
UNSUPERVISED



TL; DR

	Supervised Learning	Unsupervised Learning
Discrete	classification	clustering
Continuous	regression	dimensionality reduction

BIAS-VARIANCE TRADEOFF



- <http://scott.fortmann-roe.com/>

DEEP LEARNING

THEN



NOW



Elle O'Brien [Follow](#)

Computational scientist, software developer, science writer

Jan 6 · 2 min read

I trained a neural network on Red Lobster tweets and all it does is generate apologies

So yeah. I trained an RNN on the collected tweets of Red Lobster and it just generates forlorn apologies to fictitious customers. Does art imitate life?

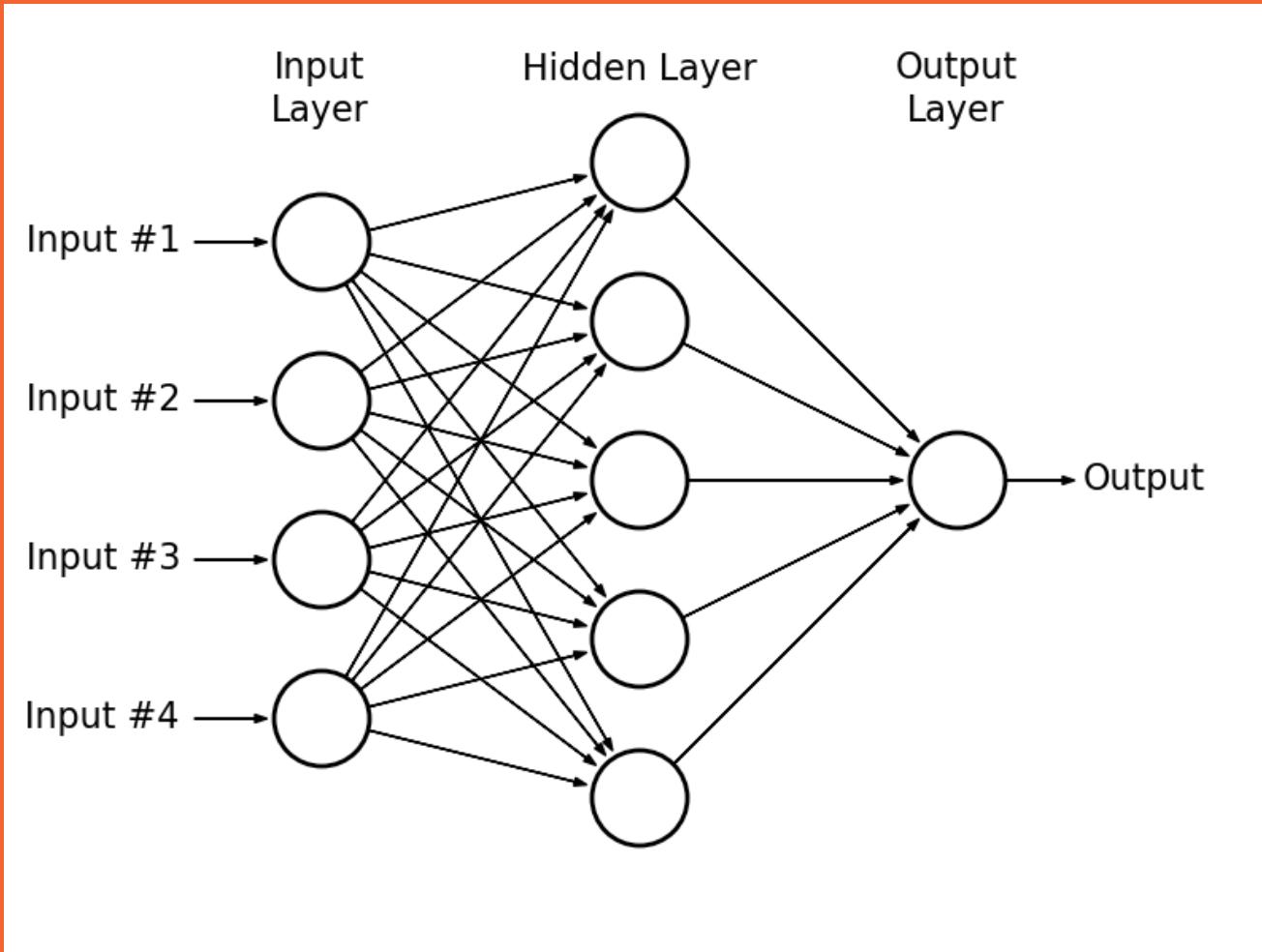
NEURAL NETWORKS

ANN

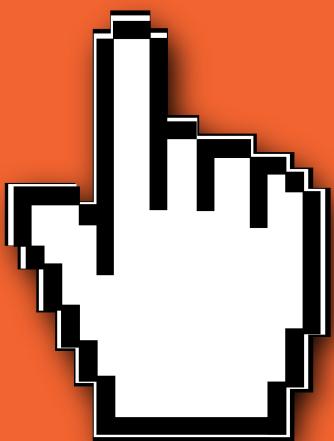
ARTIFICIAL NEURAL
NETWORK

CNN

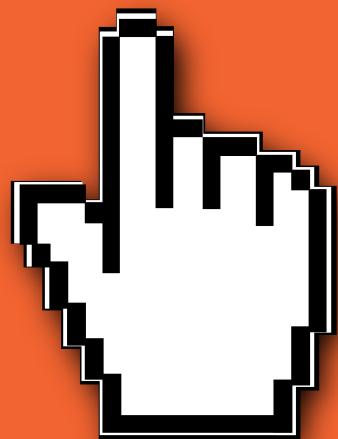
CONVOLUTIONAL
NEURAL NETWORK



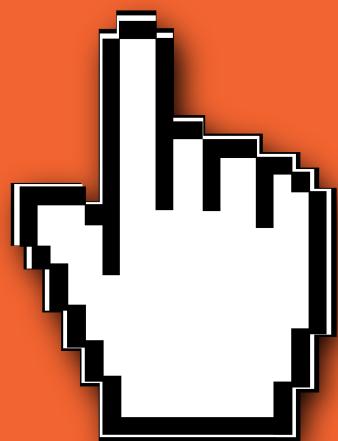
DEMO !



ANOTHER DEMO



ONE MORE DEMO



SHOUTOUT TO

**TENSORFLOW.JS
SYNAPTIC**



THANK
YOU!

@KYLIESTEW ON TWITTER

GITHUB.COM/KALE-STEW/ML-ON-THE-CL