

how to train your model



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QueensJS
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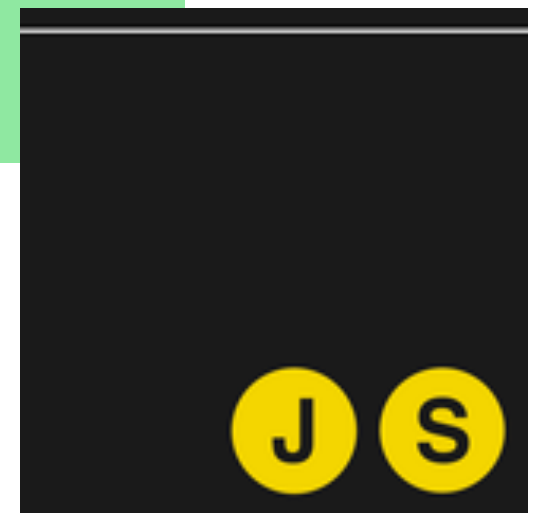


senior frontend
engineer at Slack

organizer of
BrooklynJS



organizer of
EmpireJS



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machine learning

creating algorithms
that improve
automatically through
experience over
time



machine learning

building
a mathematical
model based on
"training data" in
order to make
predictions



supervised learning

when the answers are
known ahead of time,
and the computer tries
to find a model to fit
the data

i.e. classification



unsupervised learning

when the answers
aren't known ahead of
time, and computer
finds patterns

i.e. clustering



reinforcement learning

when the answers
aren't known ahead of
time and the algorithm
learns by trial and
error through
"incentives"

popular in teaching
computers to play games



linear classifier



how we train our model

autocomplete ranking
is a matter of
classification – is it
the thing you're
looking for
or not?



how we train our model

tl;dr, turning logs
into decimals using
supervised learning



how we train our model

feature extraction

"features" are the
attributes of the
item that
could be
influencing the
classification



how we train our model

feature extraction

creates a
"feature vector" for
each item, a list
of all the
features and
their values



how we train our model

training

feature vectors from
the selected and not
selected items are
used as data
to train
the "model"



how we train our model

training

the model will be a
vector which has
weights for
each of the
features



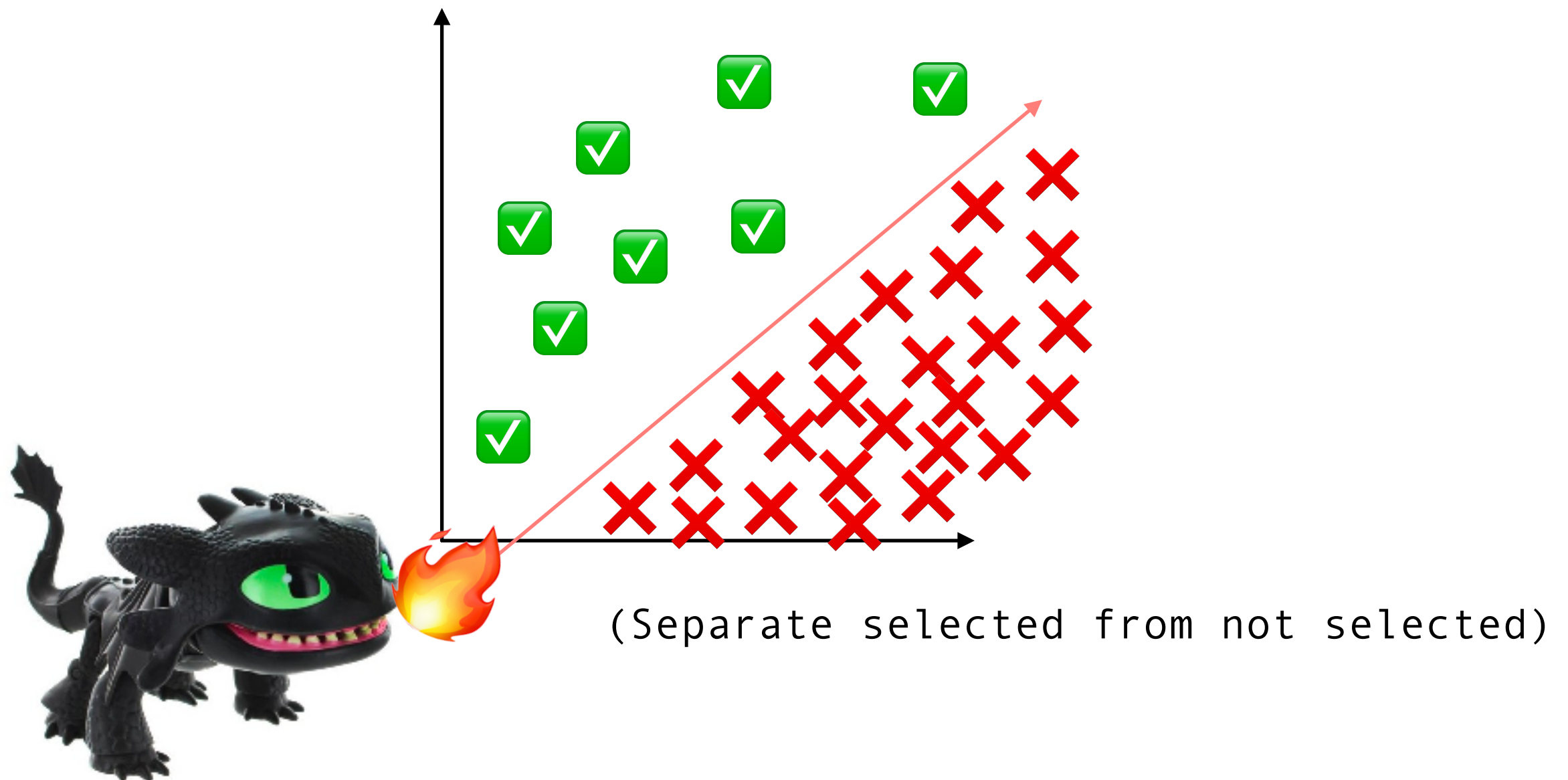
how we train a model

training



how we train our model

training



how we train our model

training



MATH

how we train our model

scoring

An item's score is the sum of the product of each feature's value and its weight



ok but neural networks?



how to train your model

ethically.

