

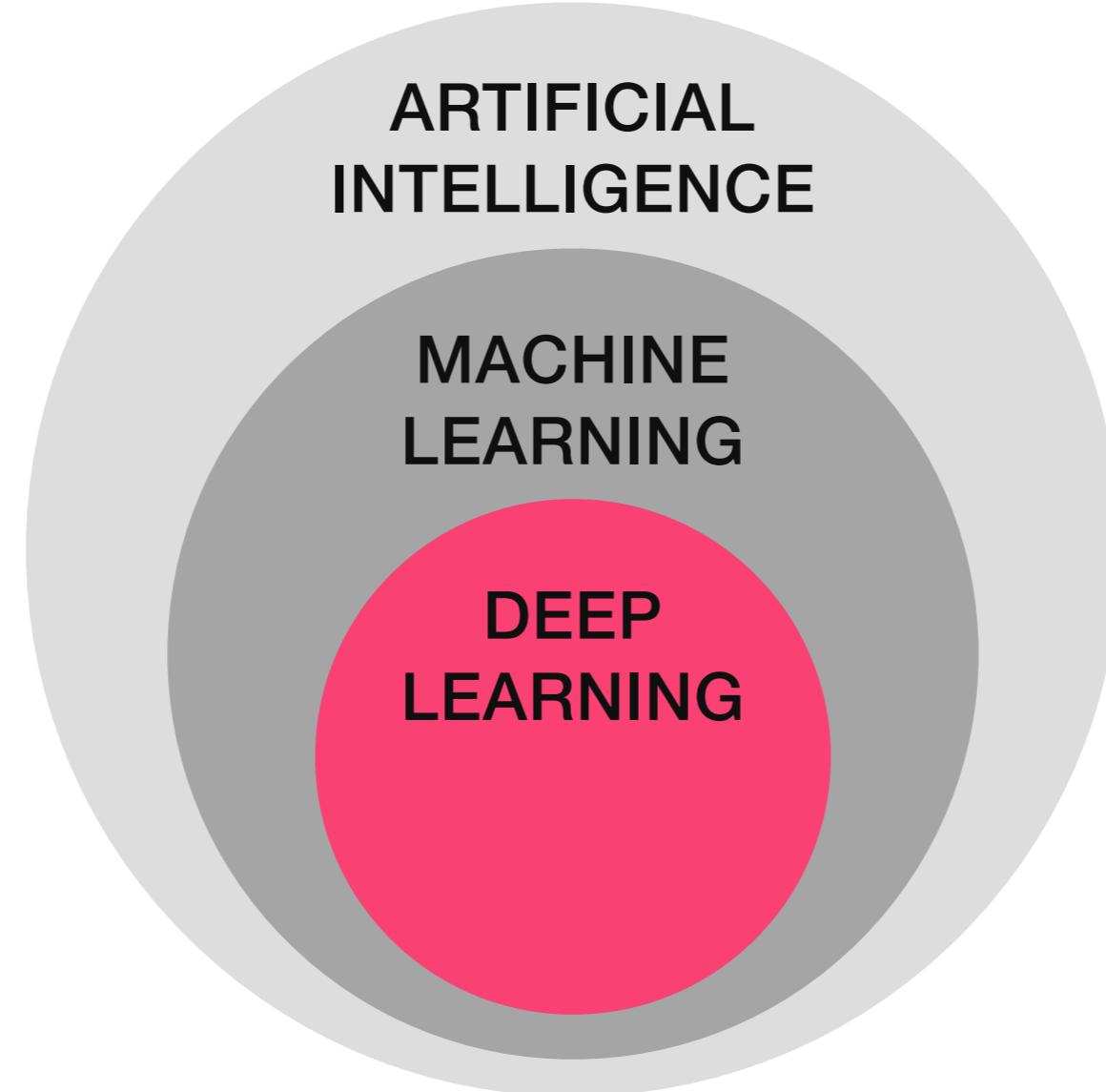
ABSCHNITT 1

JETZT SAG DOCH MAL...

WAS IST MACHINE LEARNING ÜBERHAUPT?

**MACHINE LEARNING KLINGT EIN
BISSCHEN SO ALS OB ...**

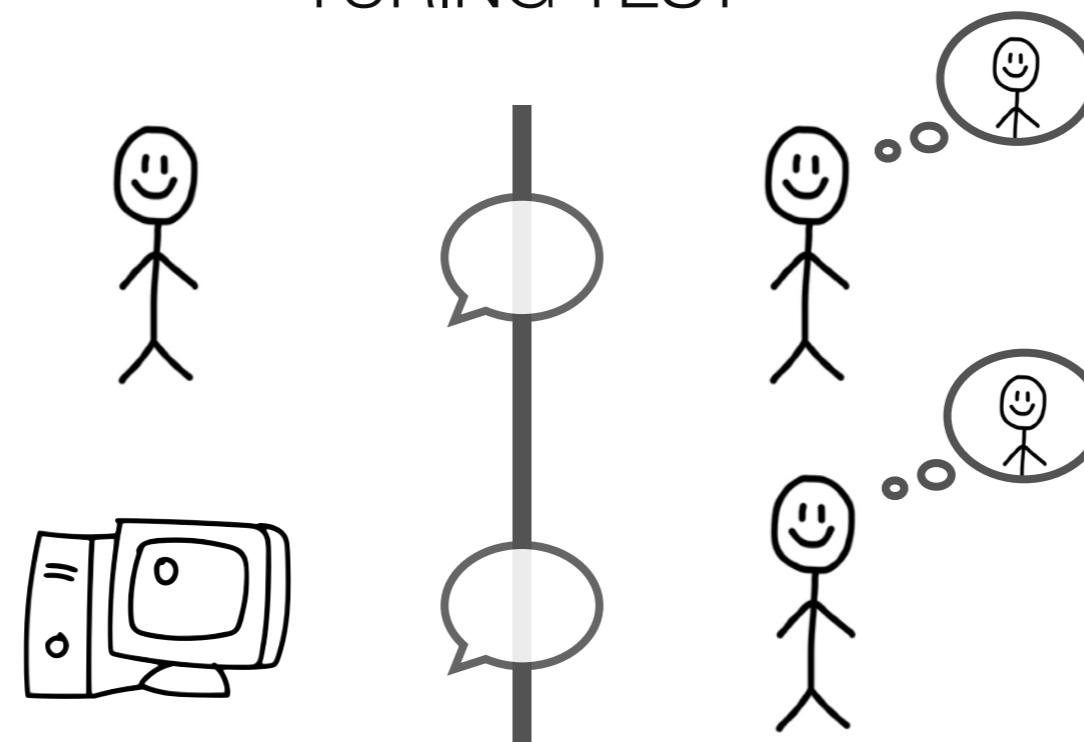
... MORGEN DIE TRANSFORMER VOR
UNSERER HAUSTÜR STEHEN.



ARTIFICIAL INTELLIGENCE - WAS IST DAS?

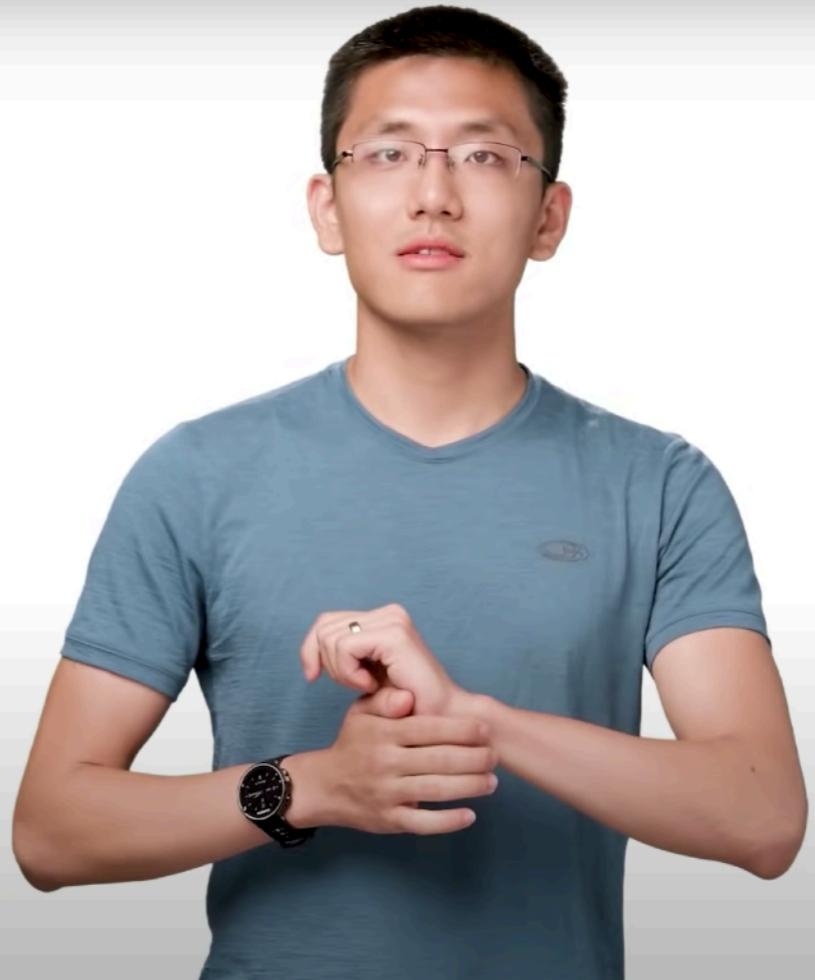
DIE MENSCHLICHE MASCHINE

TURING TEST



MACHINE LEARNING - WAS IST DAS?

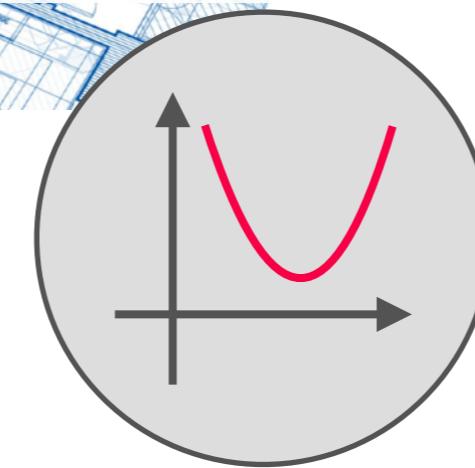
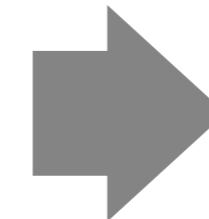
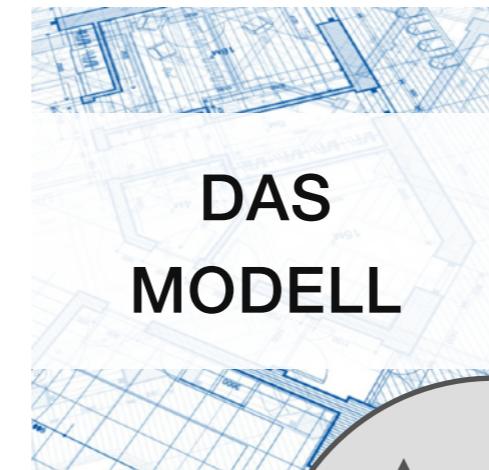
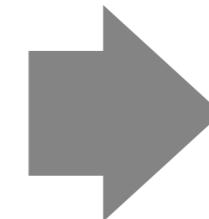
Machine Learning is
using **data** to
answer questions



MACHINE LEARNING - WAS IST DAS?

0100100101101110011101
000110010101110010011
011100110000101110100
011010010111011101111
0011000101101100001
0000001001001011111
0011010101010101111
0110100001000000100
01000110000101111001

**DER
DATENSATZ**

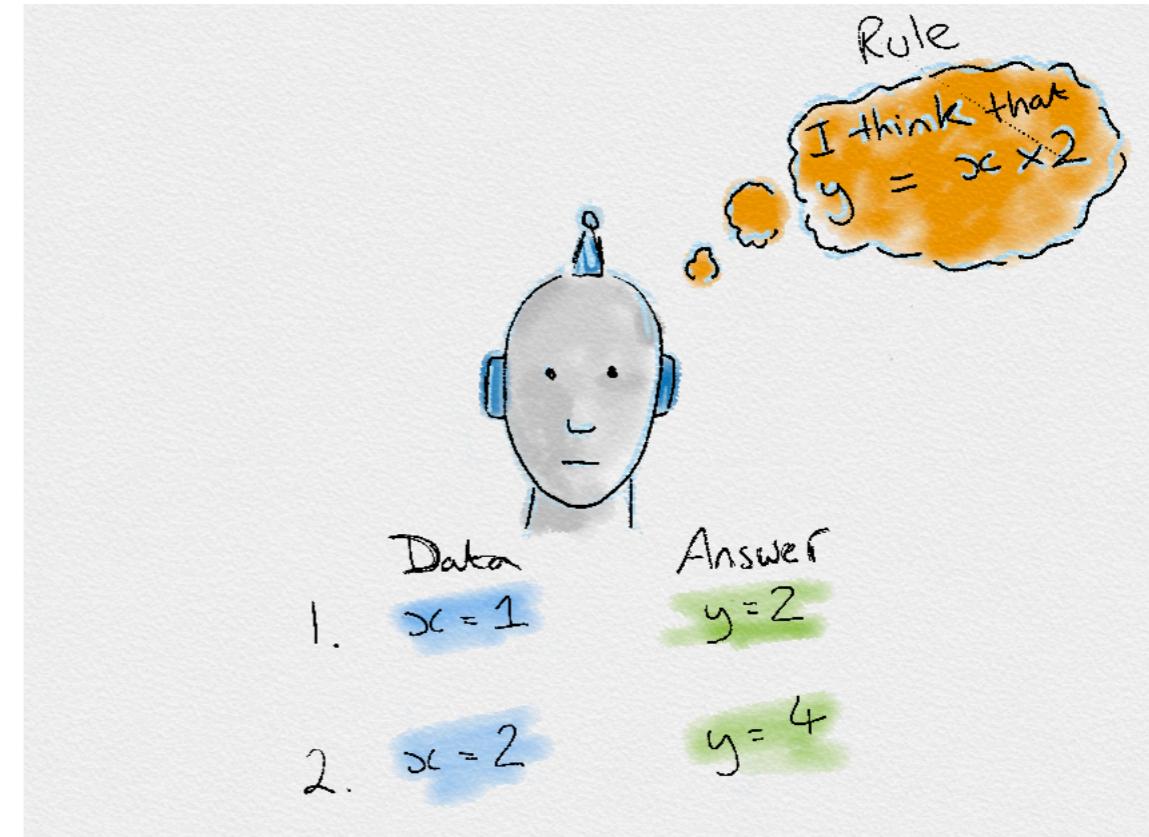
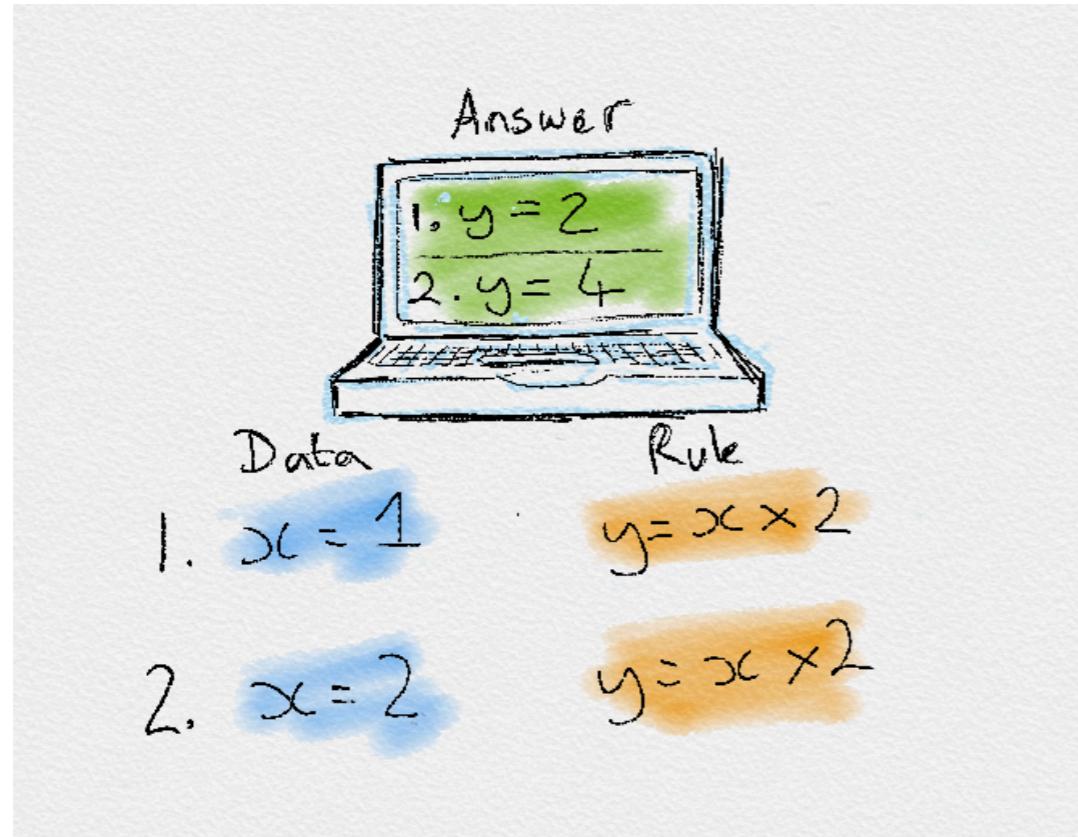


DIE LOSS-FUNKTION

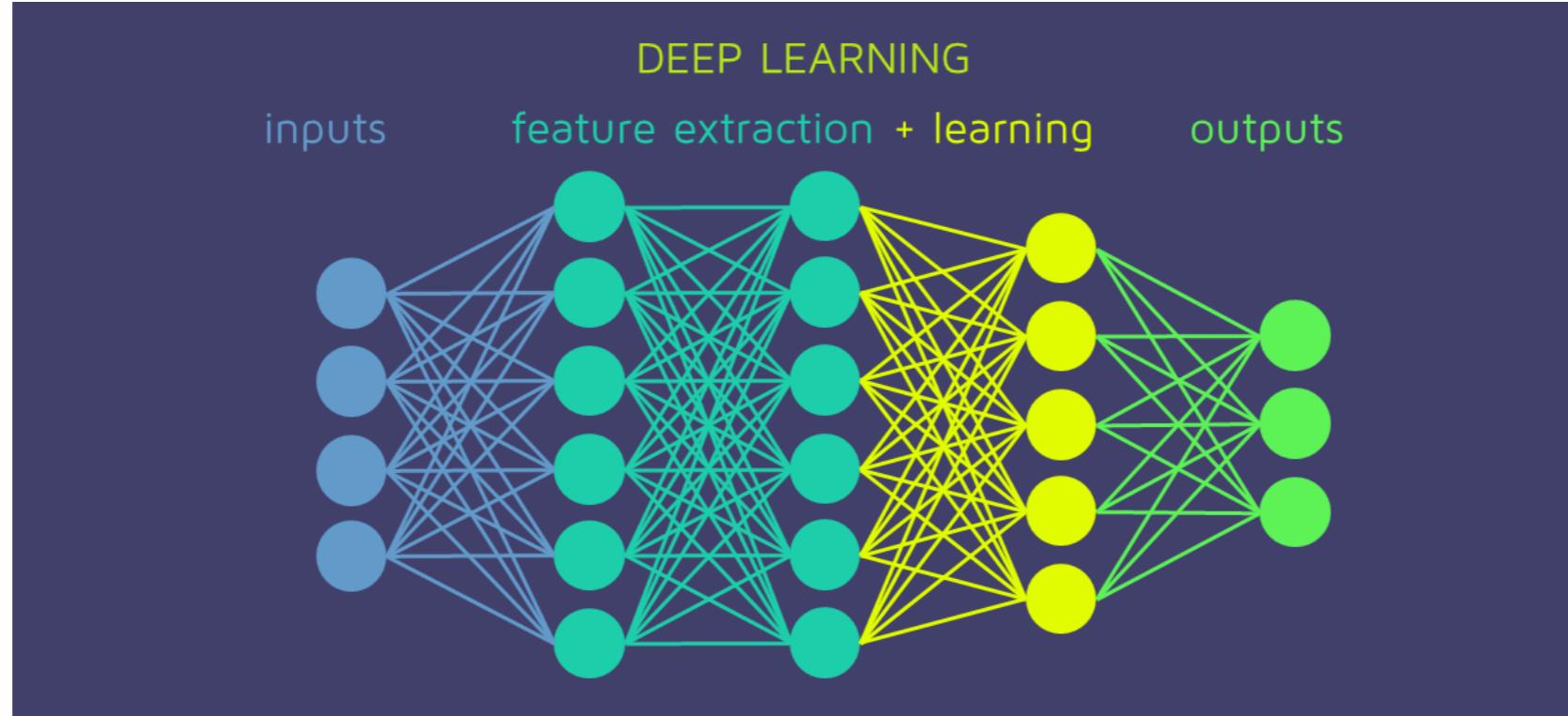


**GARBAGE IN.
GARBAGE OUT.**

MACHINE LEARNING - WAS IST DAS?

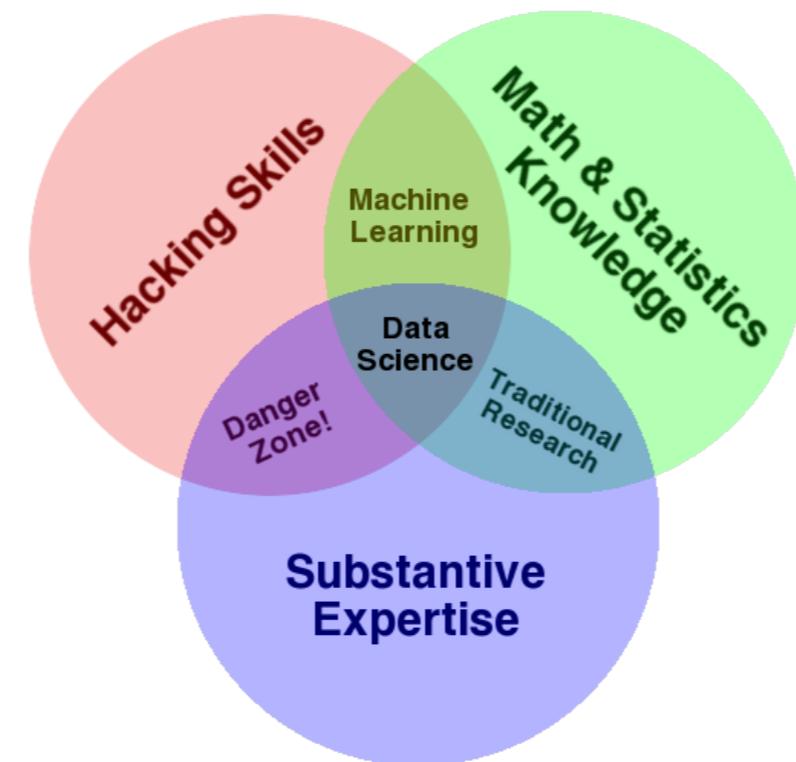


DEEP LEARNING - WAS IST DAS?



EINSCHUB: DATA SCIENCE - WAS IST DAS?

Data Science ist der Prozess, aus Daten Wissen zu gewinnen.



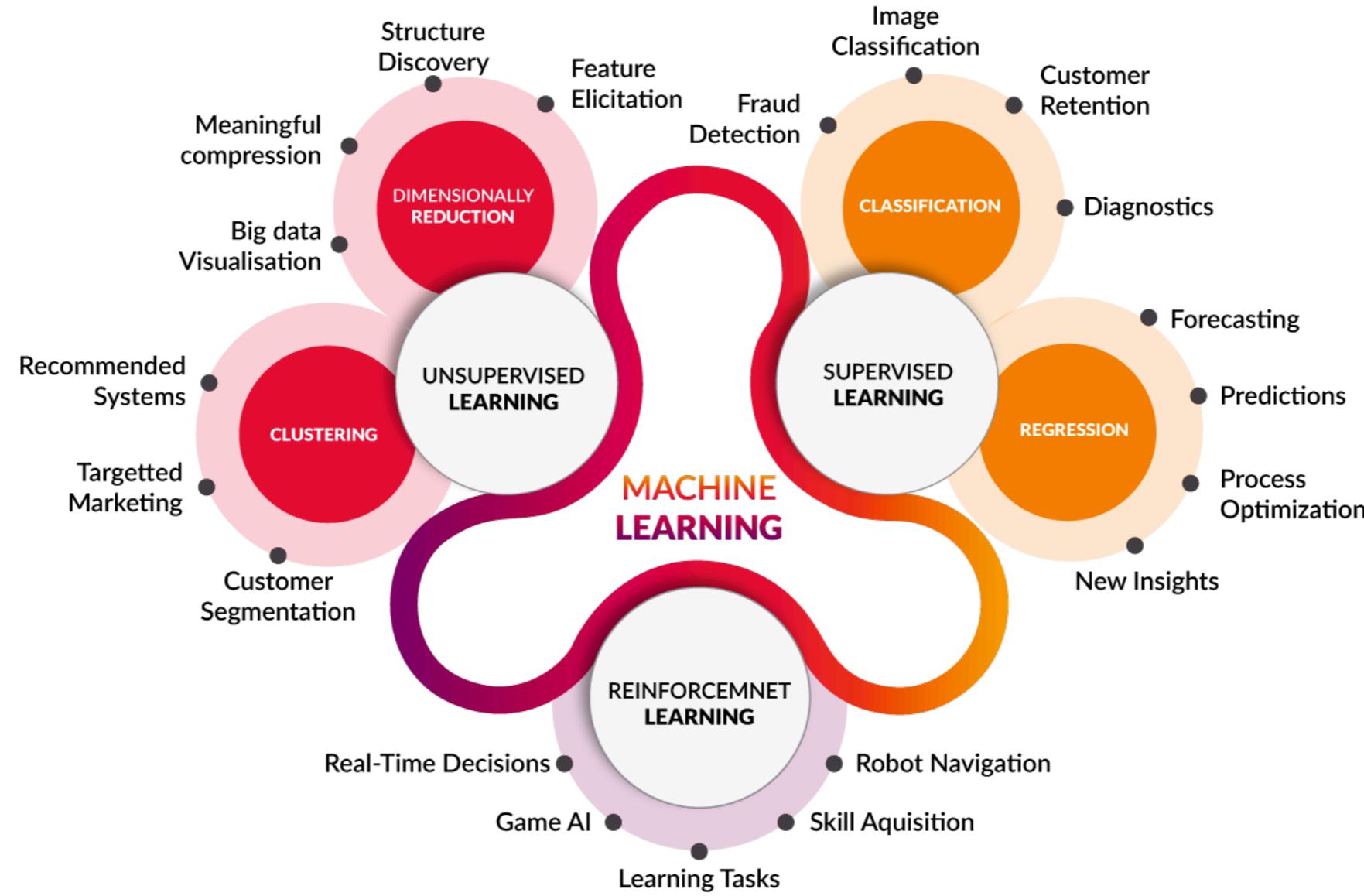


**NO FREE
LUNCH!**





**EINEN MACHINE LEARNING
BLUMENSTRAUSS, BITTE!**



MACHINE LEARNING IST ÜBERALL!

NETFLIX ORIGINAL

STRANGER THINGS

95% Match 2017 2 Seasons 4K Ultra HD 5.1

When a young boy vanishes, a small town uncovers a mystery involving secret experiments, terrifying supernatural forces and one strange little girl.

Winona Ryder, David Harbour, Matthew Modine
TV Shows, TV Sci-Fi & Fantasy, Teen TV Shows

RECOMMENDER SYSTEMS

Popular on Netflix

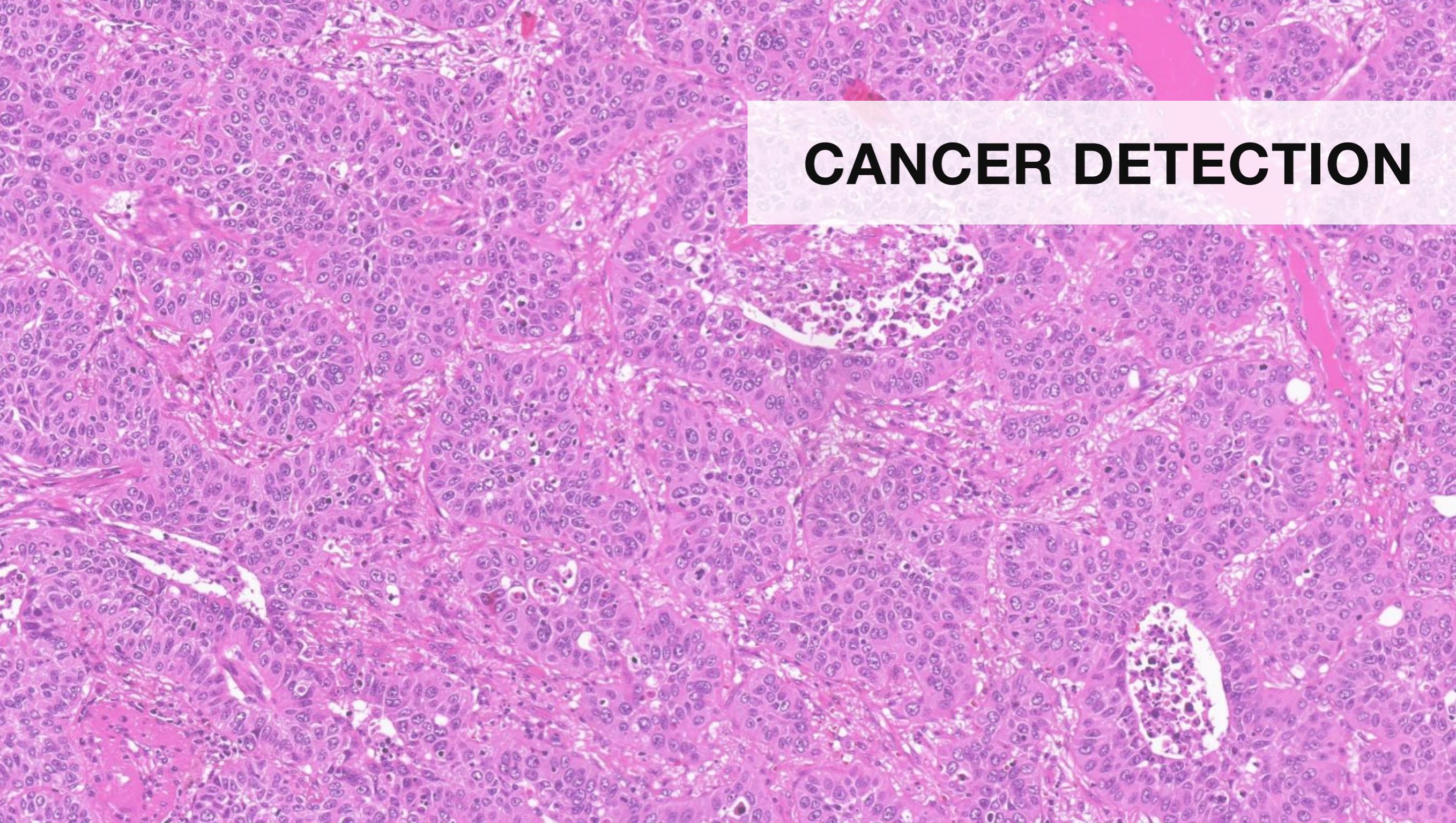


Recently Watched



FACE RECOGNITION



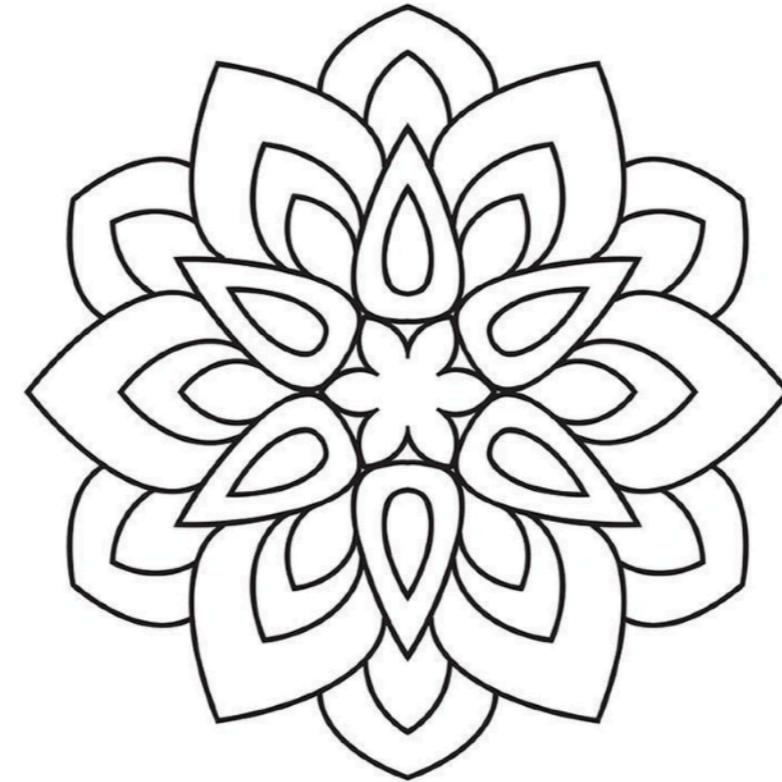


CANCER DETECTION

Artificial intelligence in structural biology is here to stay

Machine learning will transform our understanding of protein folding. And it's essential that all data be open.

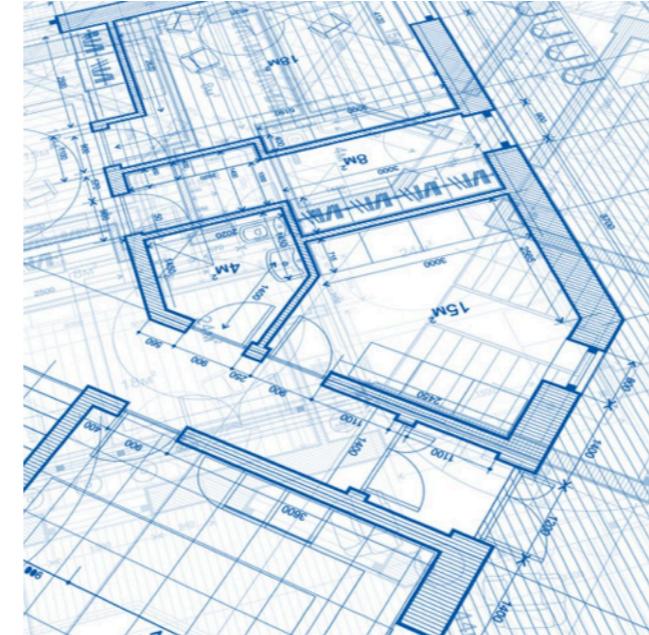
EIN KLEINER MACHINE LEARNING GLOSSAR



FEATURES & DIMENSIONS

$$2 + 2 = 4$$

GROUND TRUTH



MODEL



PARAMETERS



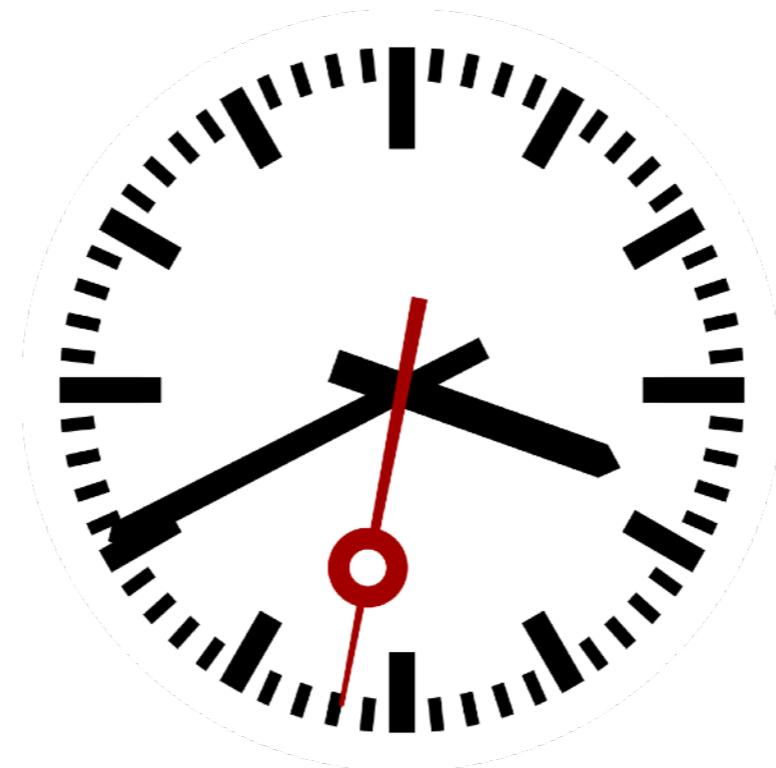
ARCHITECTURE



COST FUNCTION & LOSS



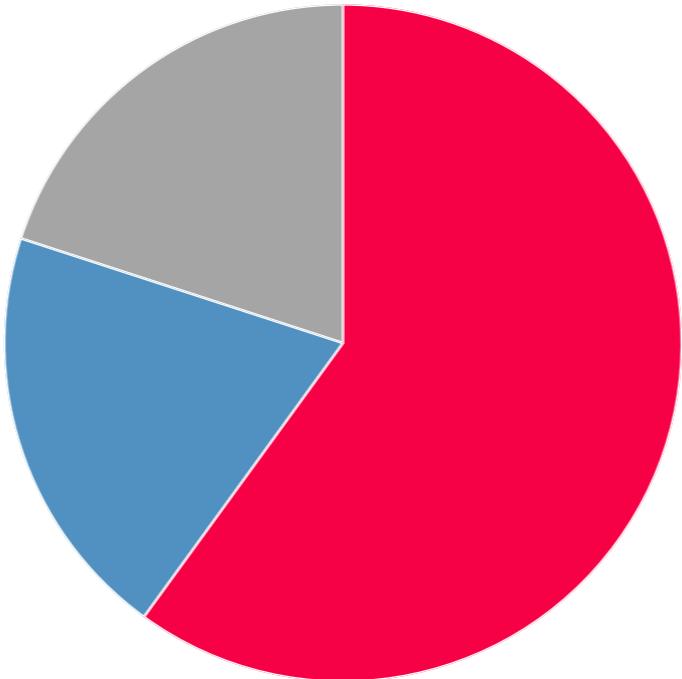
TASK



EPOCH



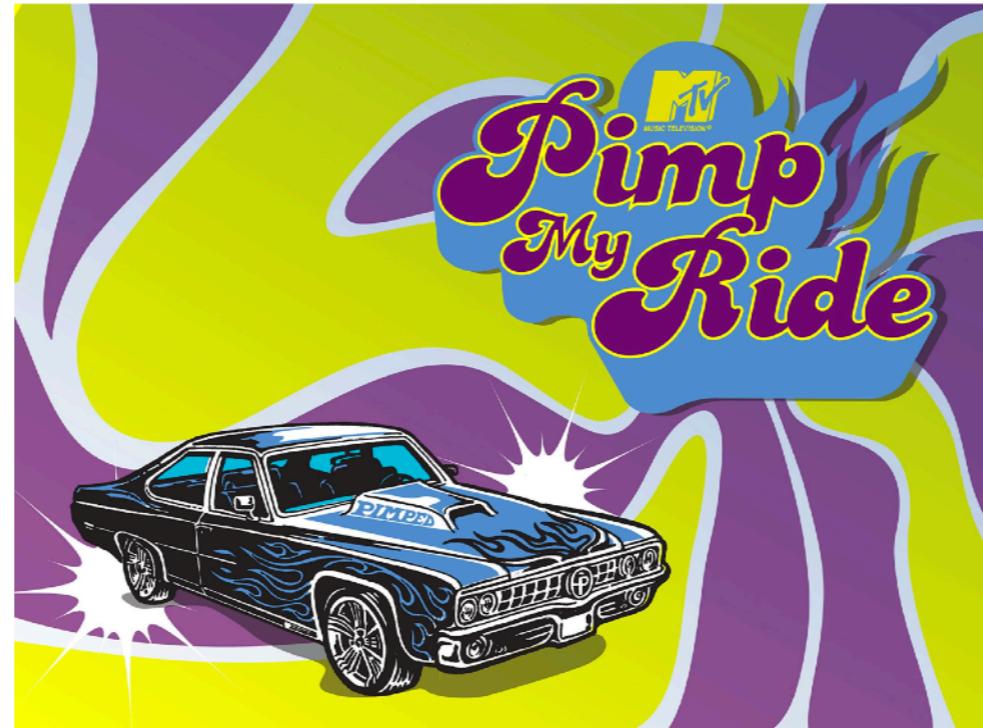
BATCH



TRAINING, VALIDATION & TEST SET



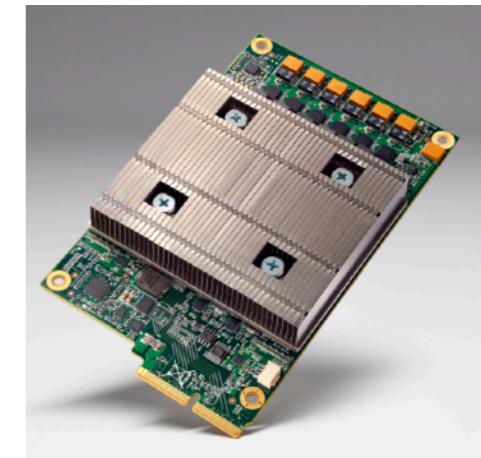
OVERFITTING & UNDERFITTING



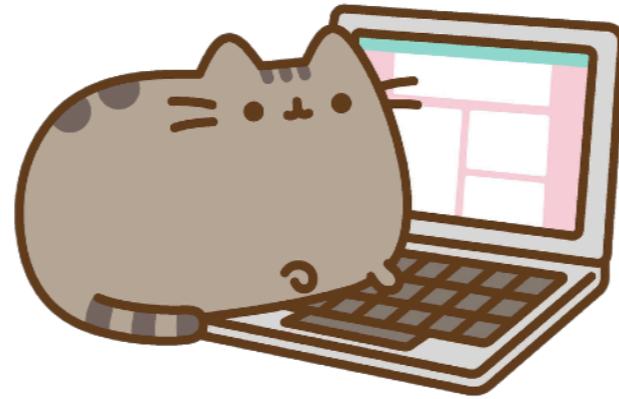
TUNING



TRANSFER LEARNING



CPU, GPU & TPU



THANK YOU!

RESSOURCEN

Computer Scientist Explains Machine Learning in 5 Levels of Difficulty
(ein WIRED Format):

<https://www.youtube.com/watch?v=5q87K1WaoFI&t=1370s>