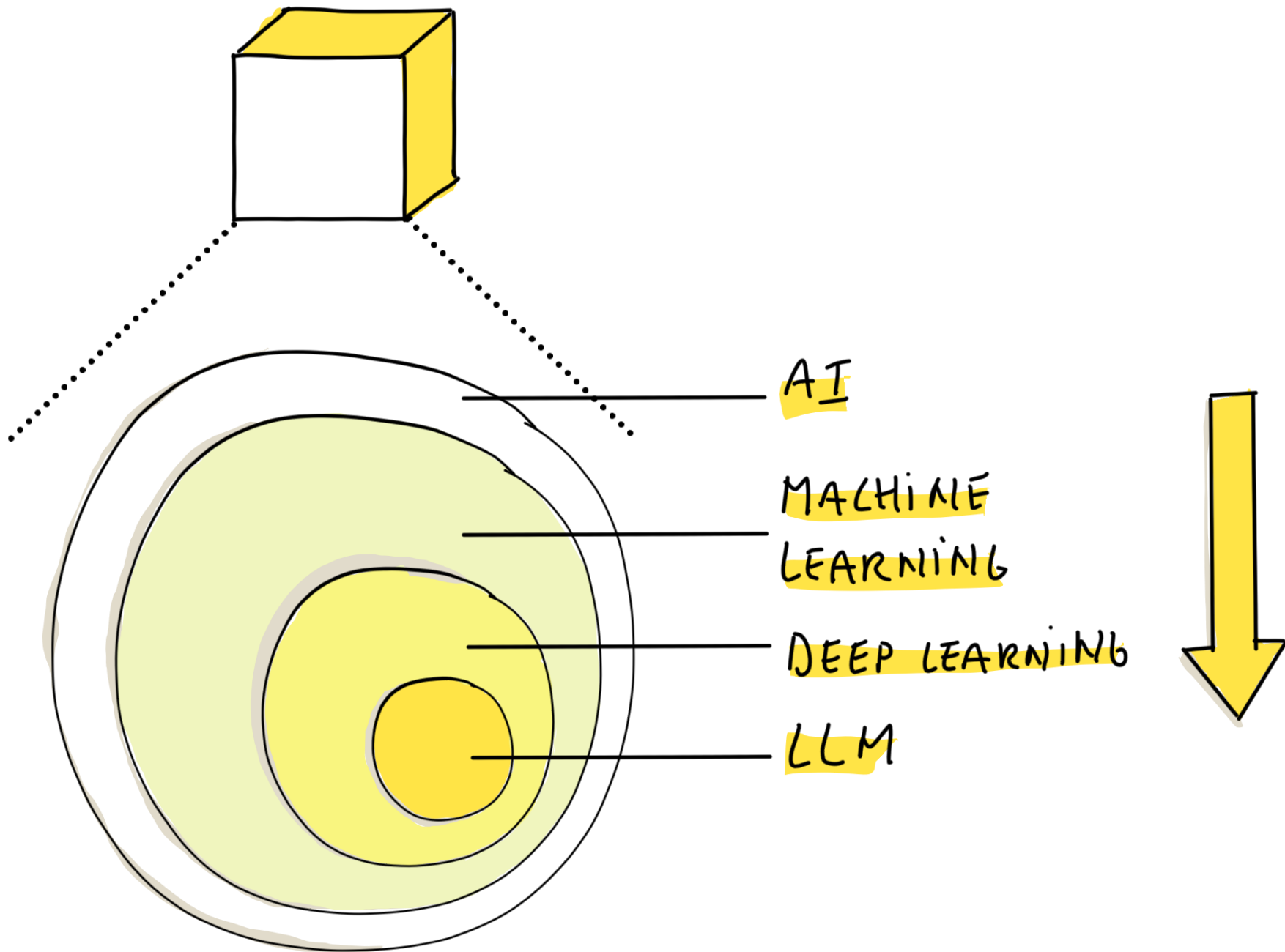


DEEL 3

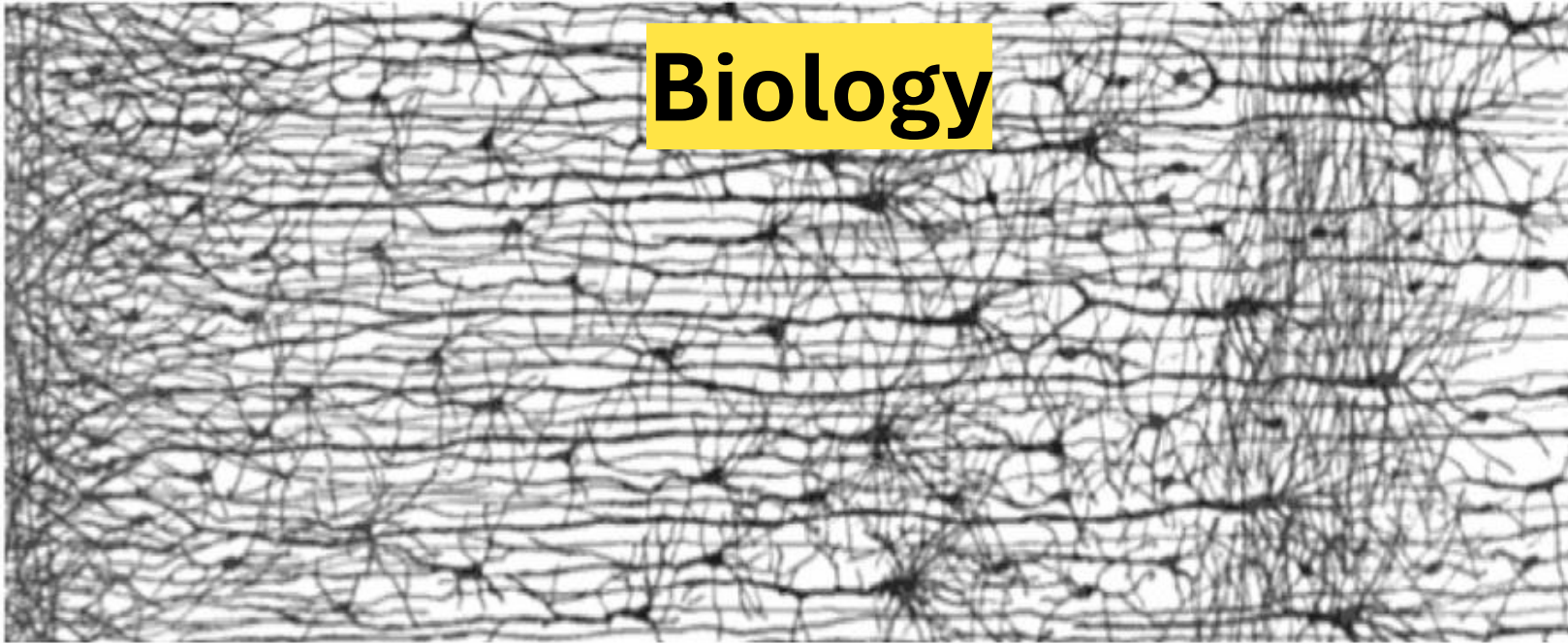
DEEP LEARNING

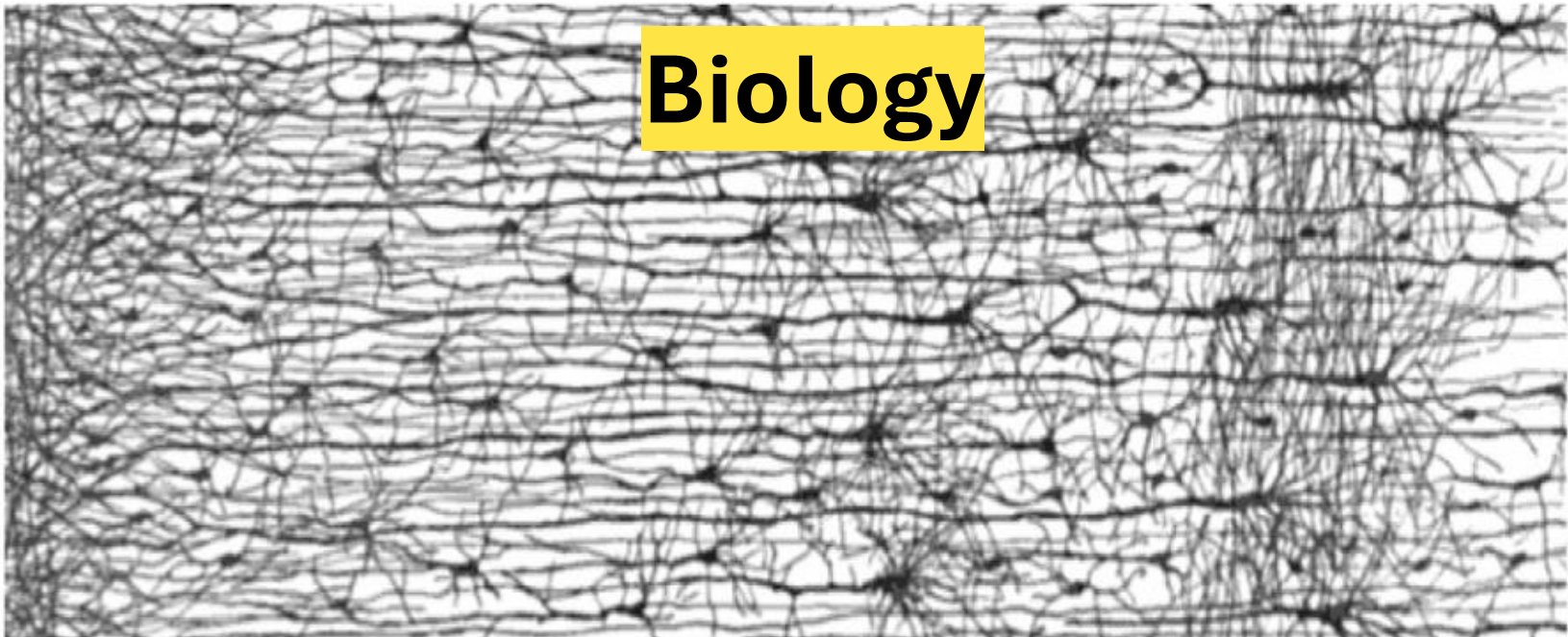


The background features a complex, glowing blue neural network. A central node is highlighted with a purple sphere. Several orange light flares are scattered throughout the network, suggesting active connections or data flow. The overall aesthetic is futuristic and high-tech.

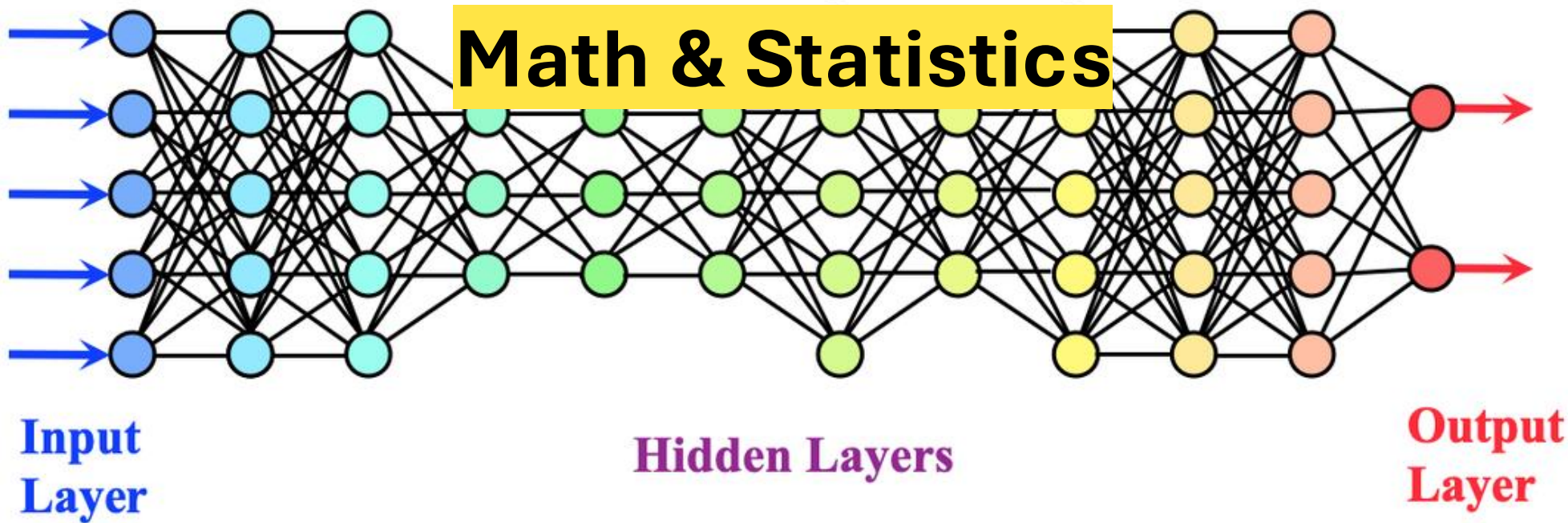
Basis model voor Deep Learning: **Neuraal Netwerk**

Biology





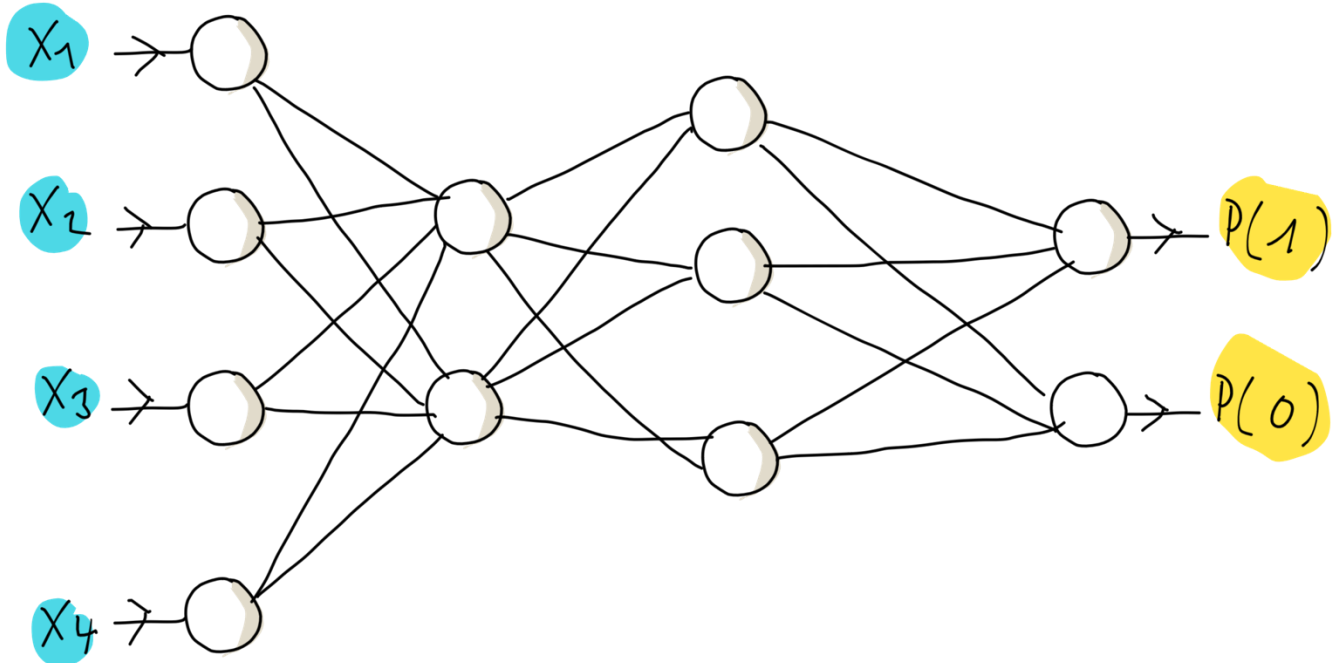
Biology





ANN: Artificial Neural Network

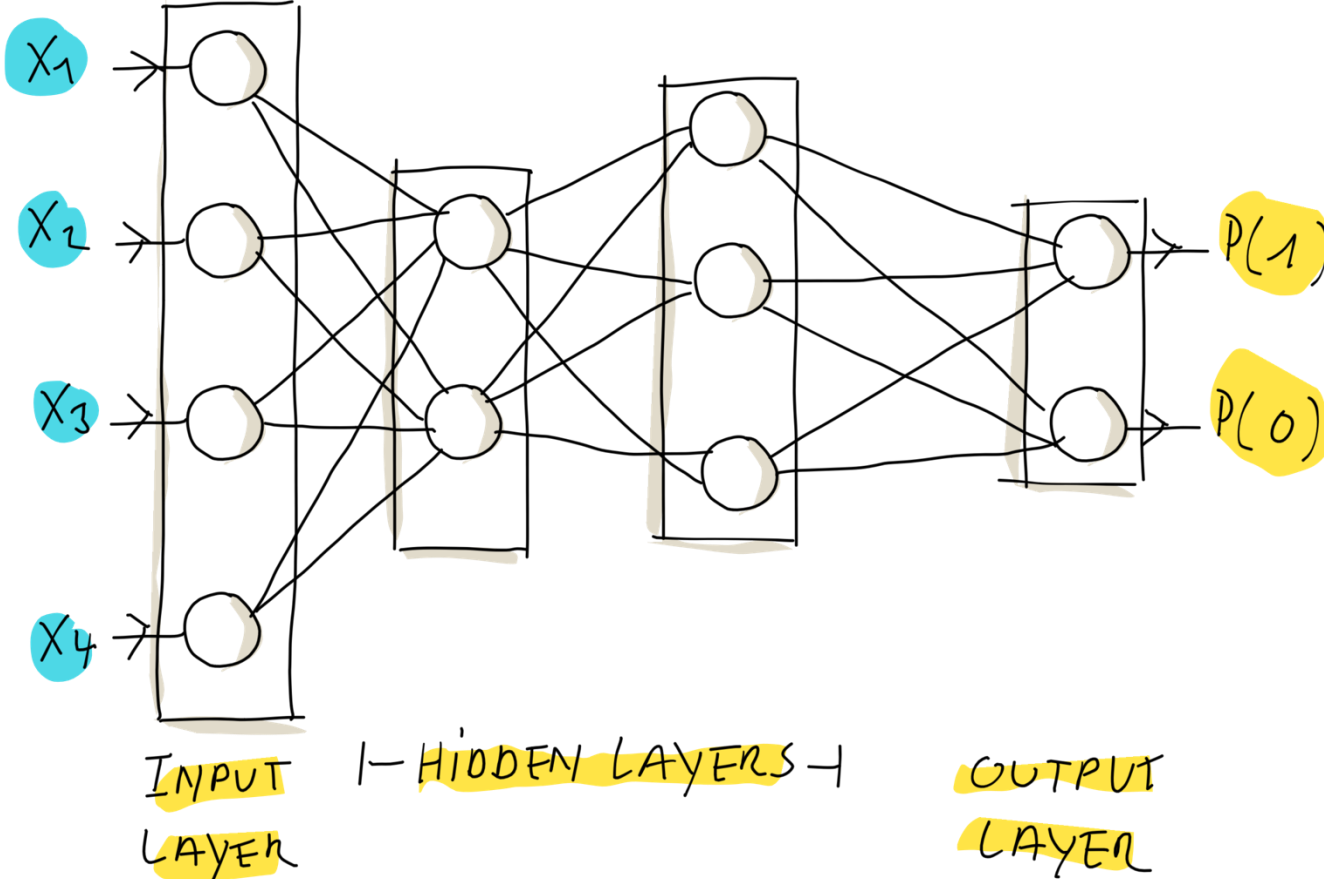
x_1	x_2	x_3	x_4	y
0.1	5.2	-1	T	1
0.2	4.9	-3	T	0
0.4	8	-4	F	0
0.3	3	-5	F	1
0.9	2	-2	T	0



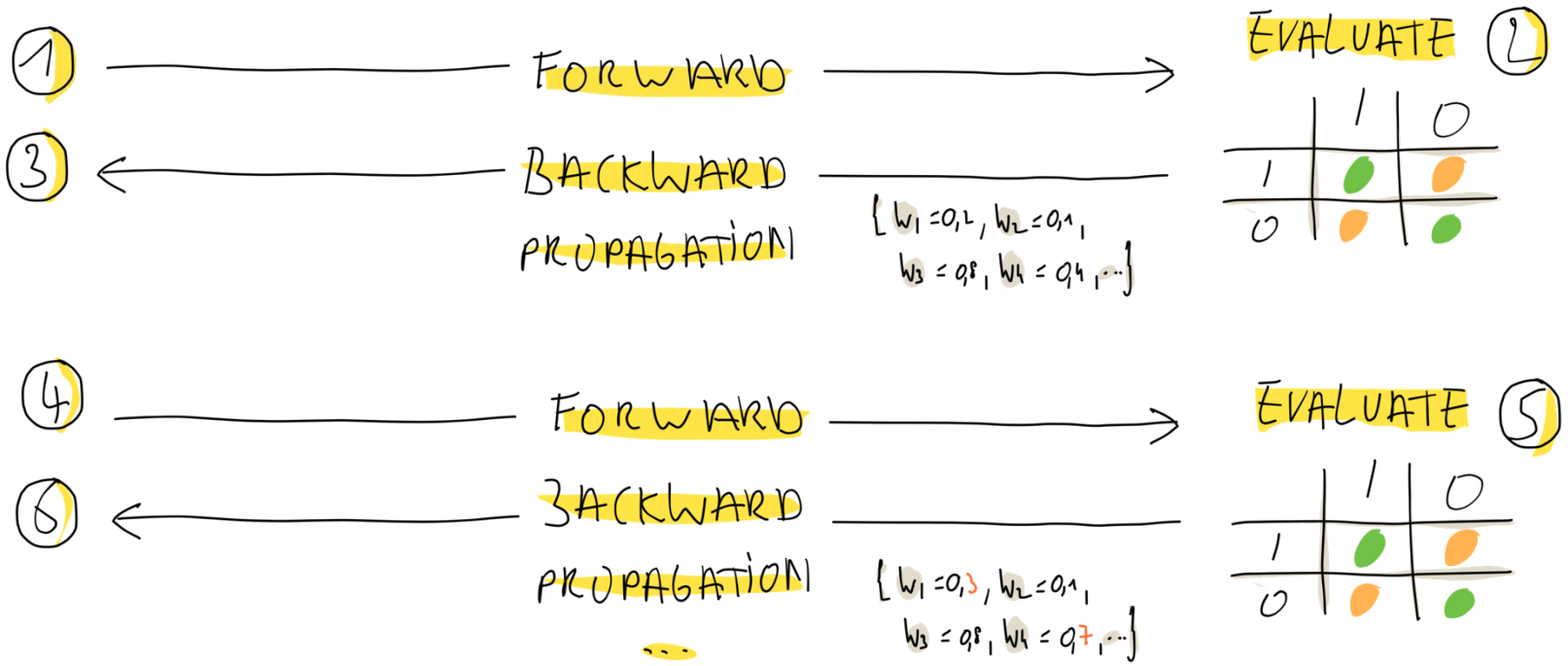
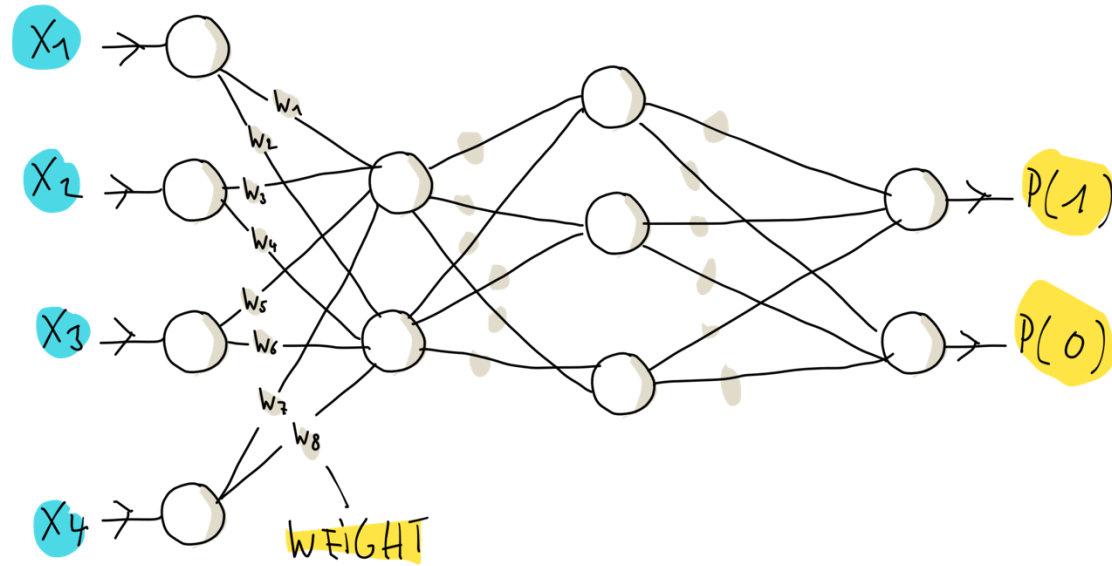


ANN: Artificial Neural Network

x_1	x_2	x_3	x_4	y
0.1	5.2	-1	T	1
0.2	4.9	-3	T	0
0.4	8	-4	F	0
0.3	3	-5	F	1
0.9	2	-2	T	0



ANN Training



EVALUATE ②

	1	0
1	●	●
0	●	●

EVALUATE ⑤

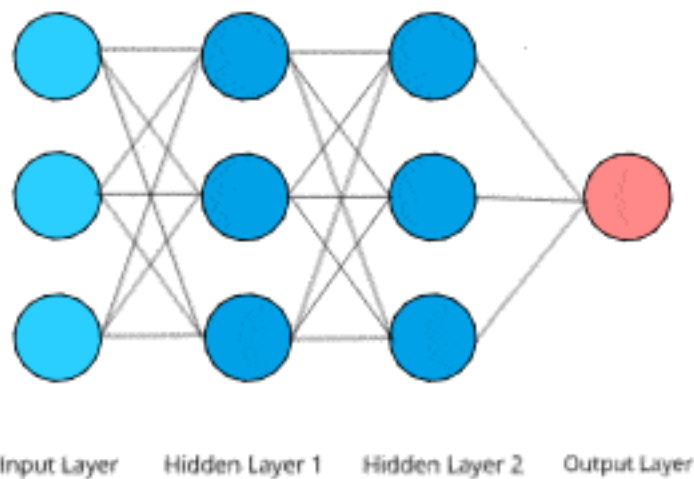
	1	0
1	●	●
0	●	●



Feed new data



X1
X2
X3

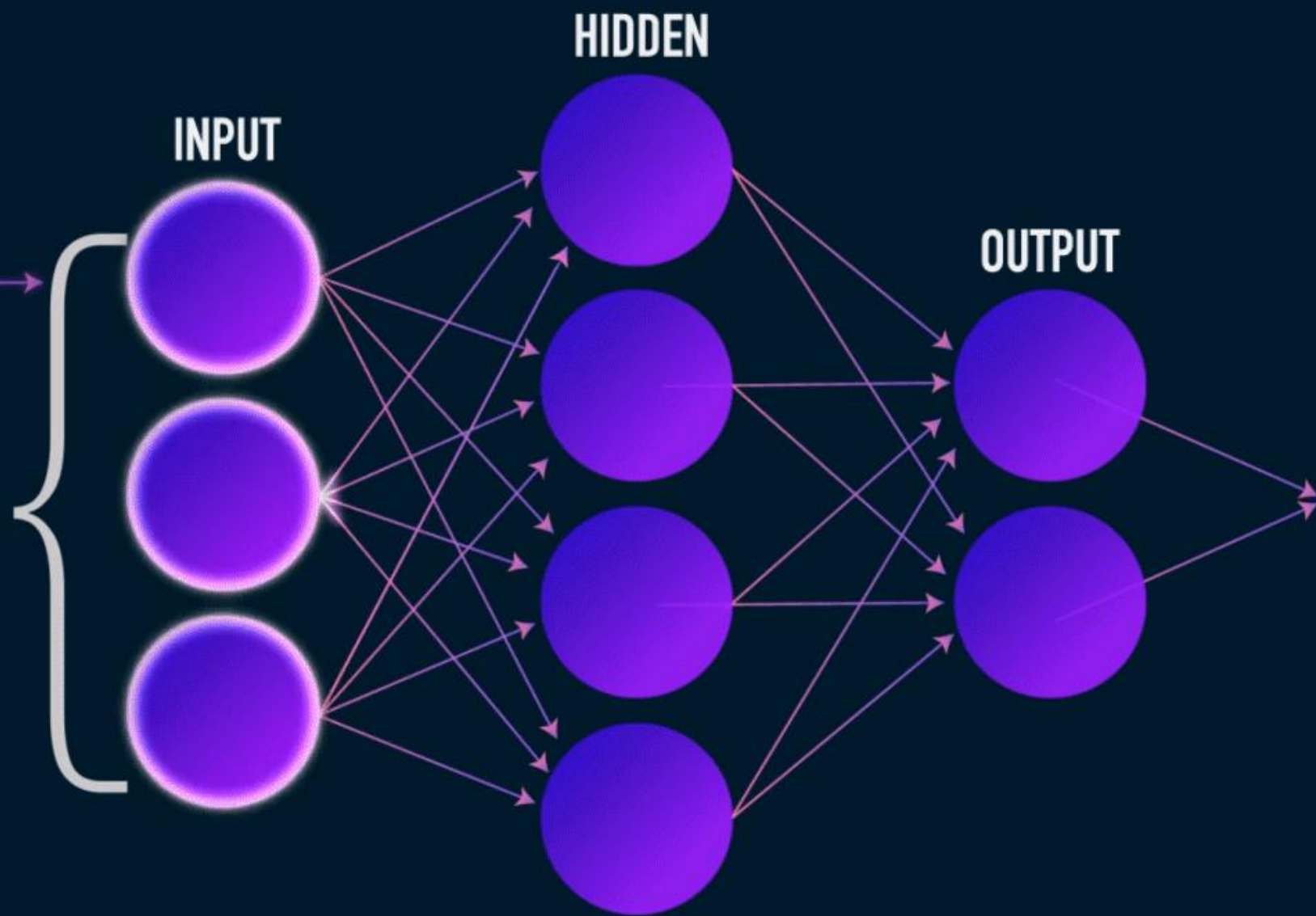


Y_pred



Error

Y



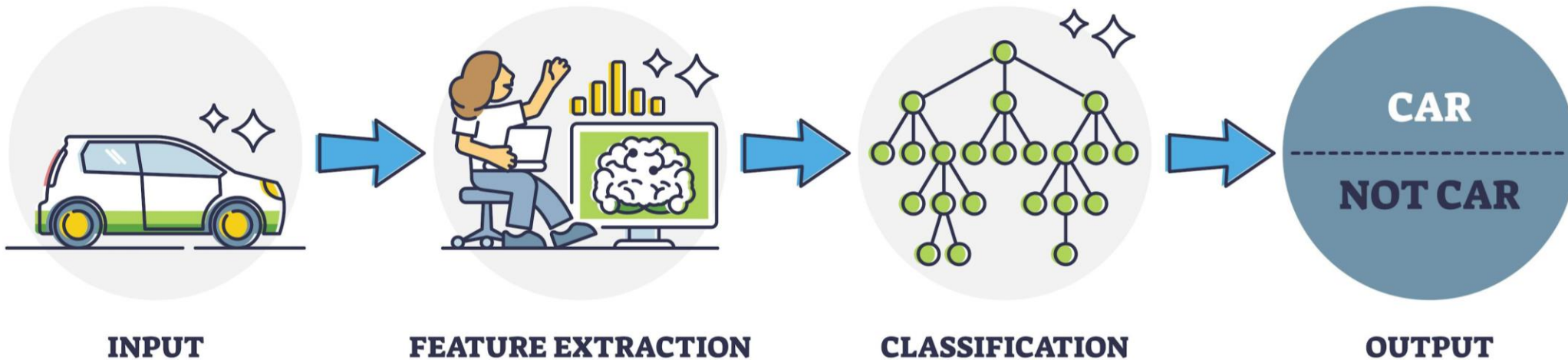


Example: Diabetes Prediction

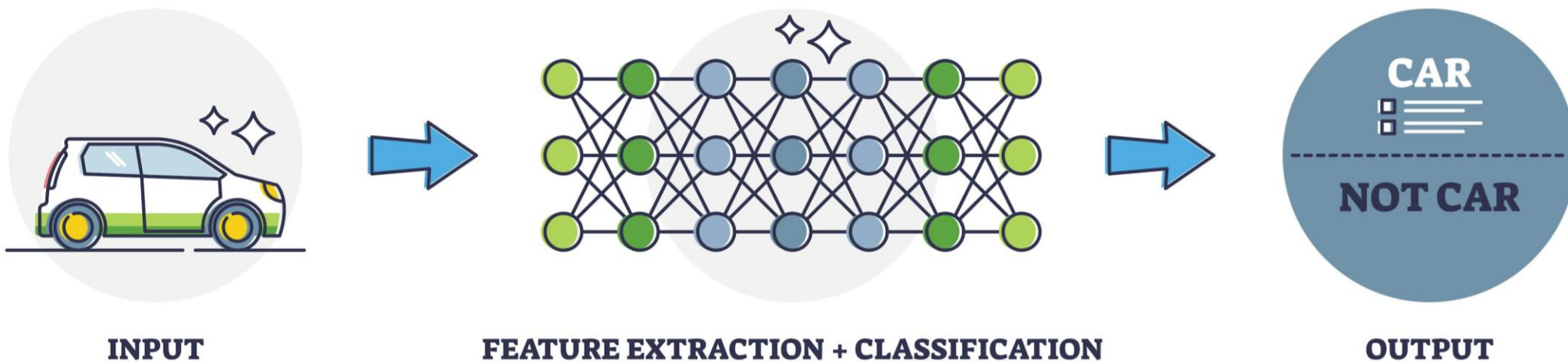
	Pregnancies	Glucose	BloodPressure	SkinThickness	Insulin	BMI	DiabetesPedigreeFunction	Age	Outcome
0	6	148	72	35	0	33.6	0.627	50	1
1	1	85	66	29	0	26.6	0.351	31	0
2	8	183	64	0	0	23.3	0.672	32	1
3	1	89	66	23	94	28.1	0.167	21	0
4	0	137	40	35	168	43.1	2.288	33	1
5	5	116	74	0	0	25.6	0.201	30	0
6	3	78	50	32	88	31.0	0.248	26	1
7	10	115	0	0	0	35.3	0.134	29	0
8	2	197	70	45	543	30.5	0.158	53	1
9	8	125	96	0	0	0.0	0.232	54	1

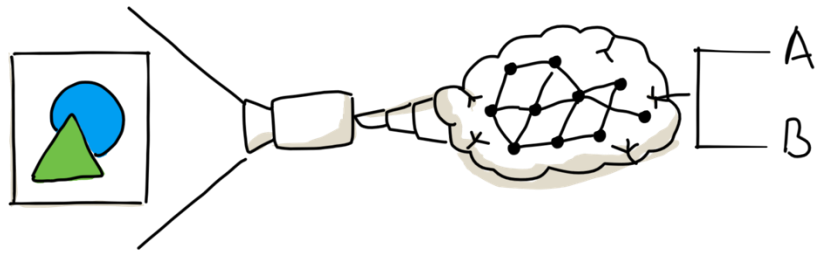


MACHINE LEARNING

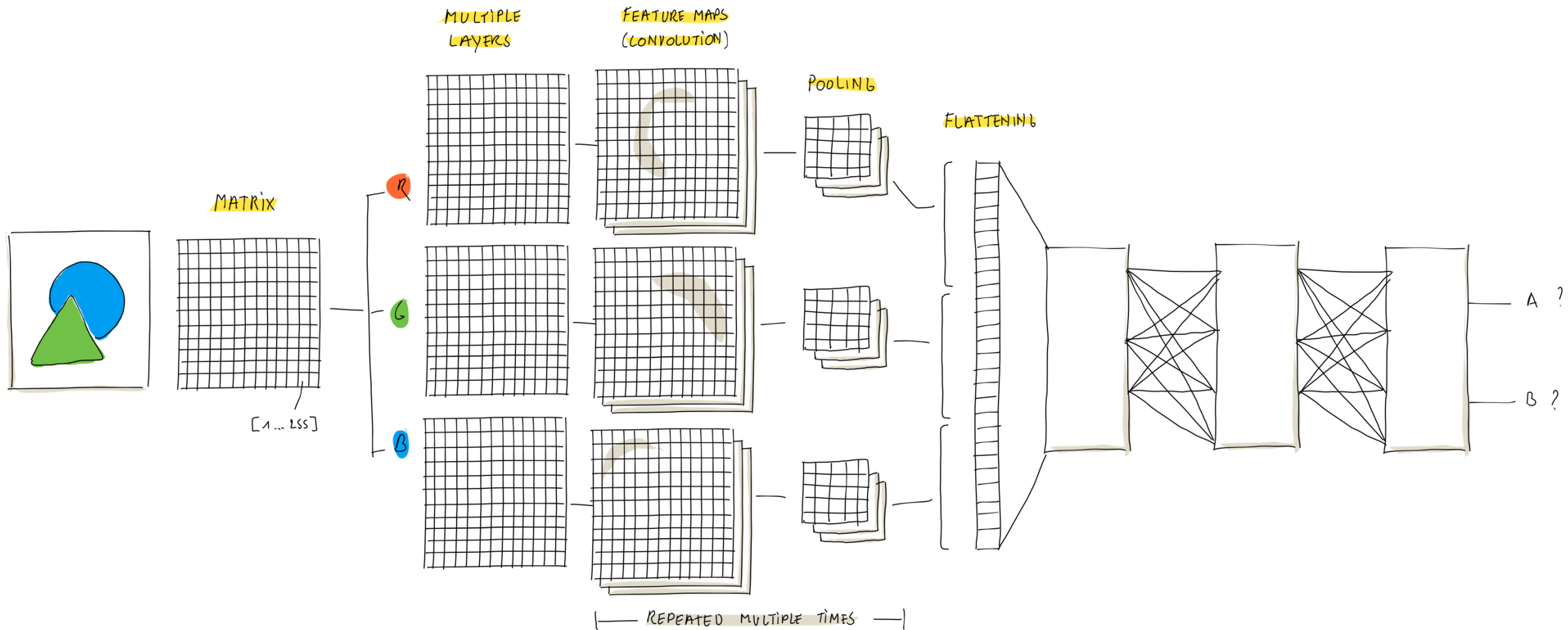


DEEP LEARNING





INPUT | CAMERA | FULLY CONNECTED NN

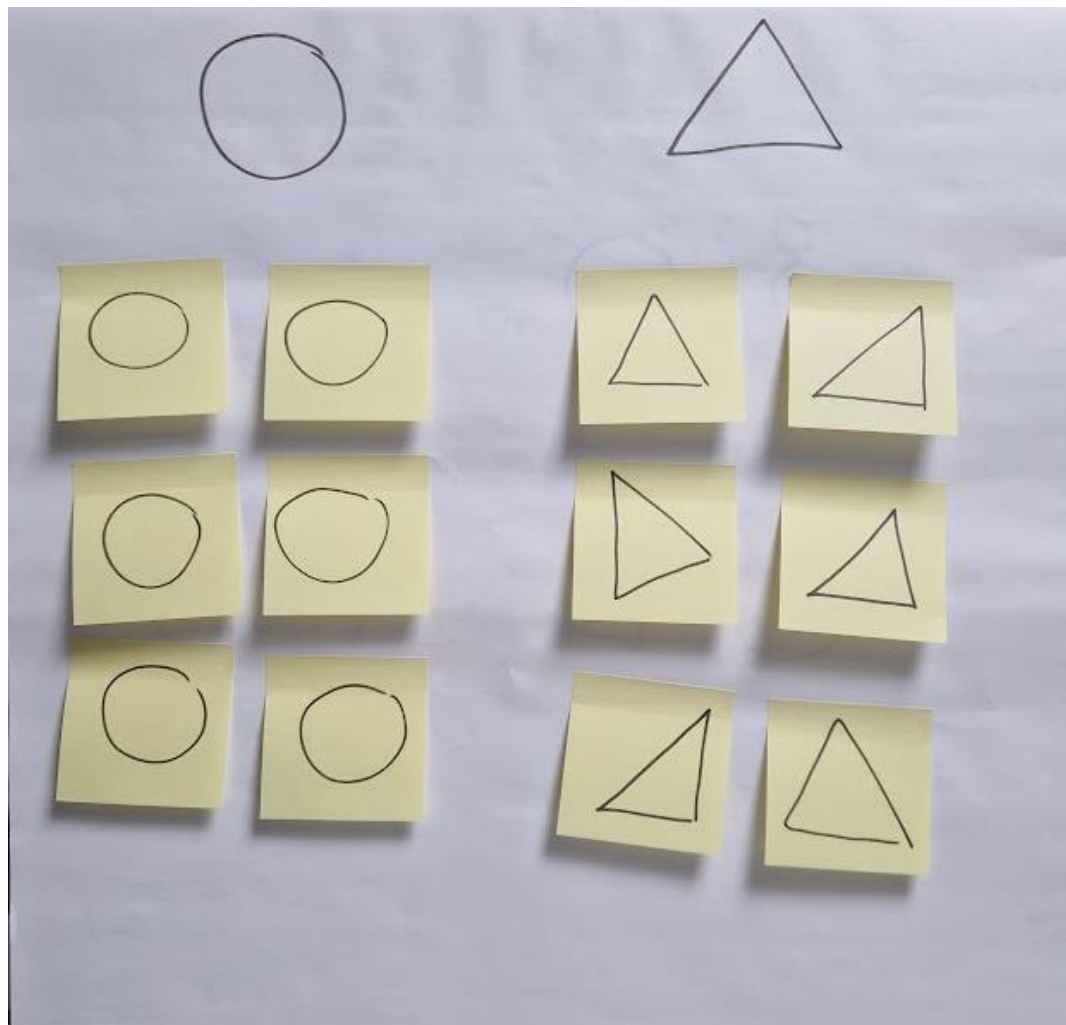




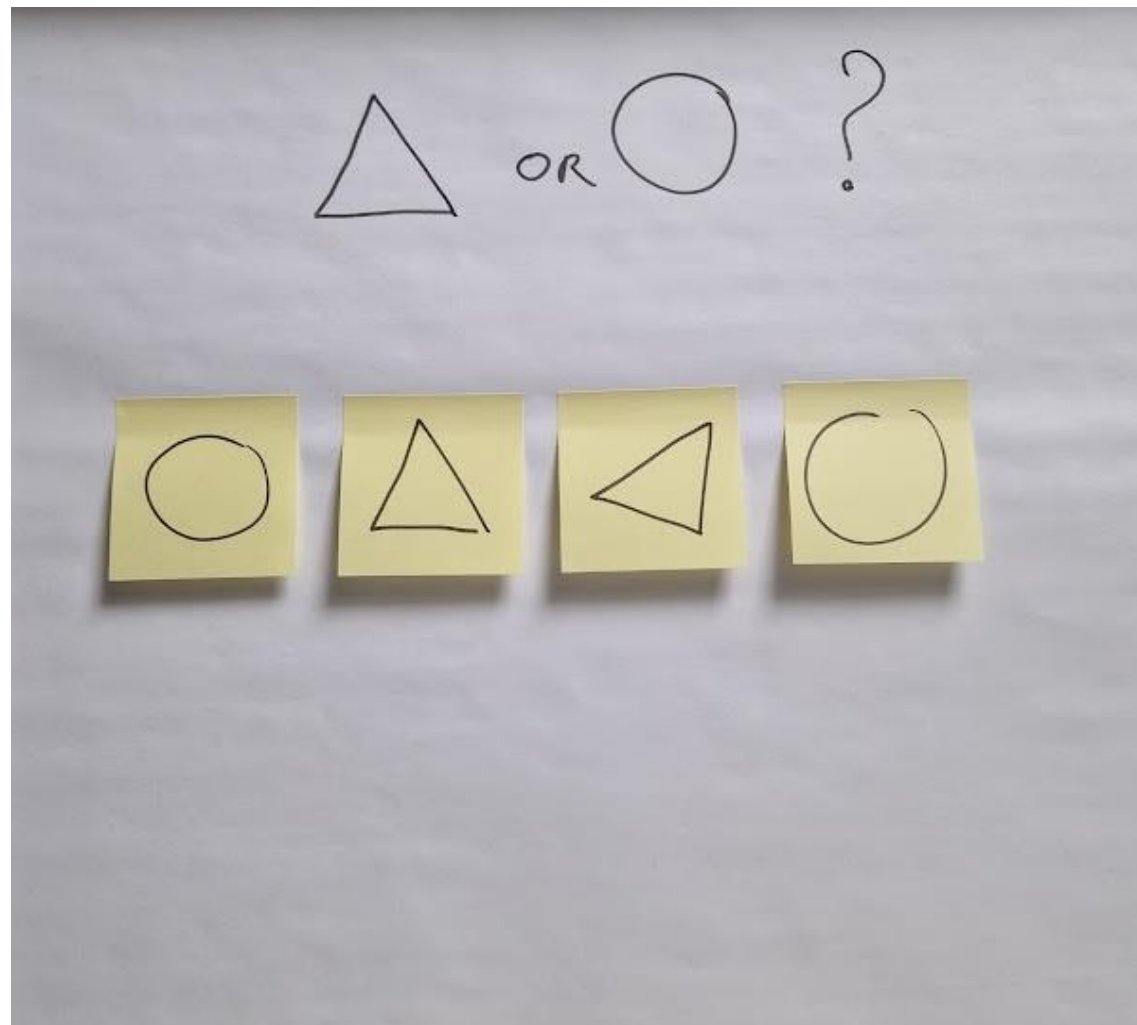
2D CNN ANIMATION

BASIC ARCHITECTURE

TRAINING

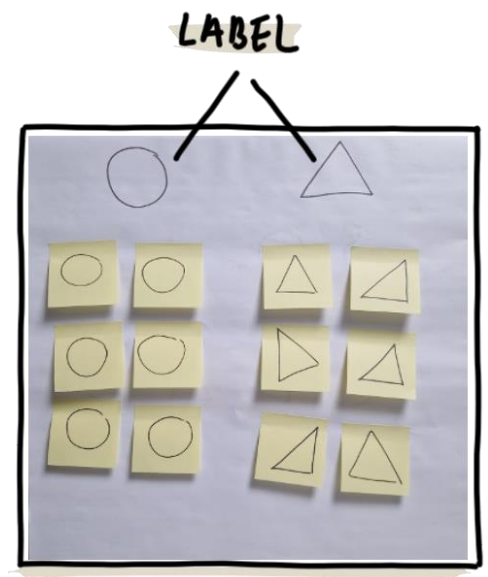


SERVING

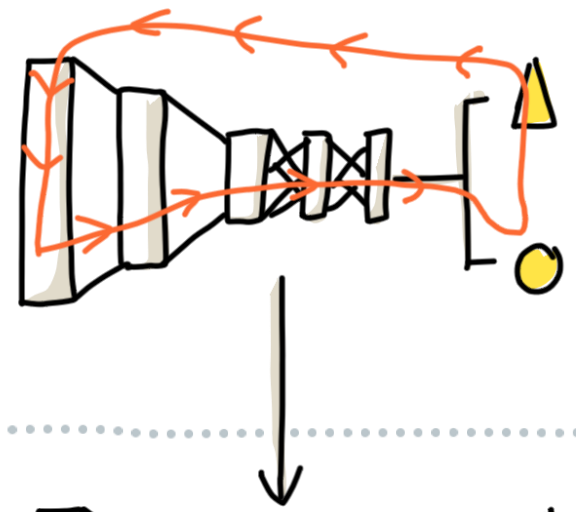


TRAINING

1 TRAINING DATA

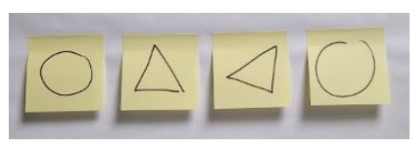


2 ANN TRAINING

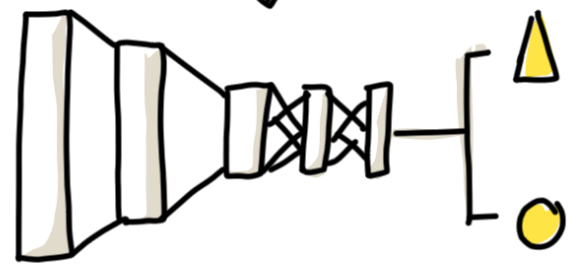


SERVING

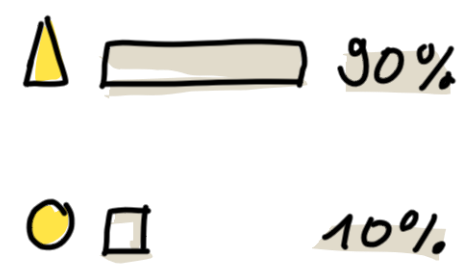
4 NEW DATA



3 TRAINED ANN



4 PREDICTION

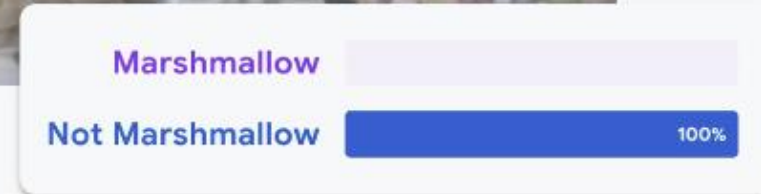
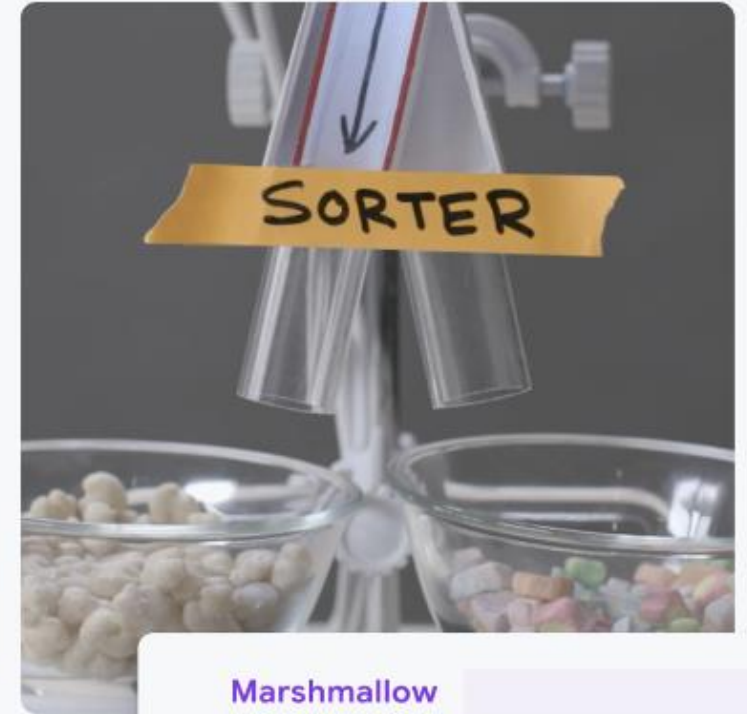


Teachable Machine

Train a computer to recognize your own images, sounds, & poses.

A fast, easy way to create machine learning models for your sites, apps, and more – no expertise or coding required.

Get Started



DEMO

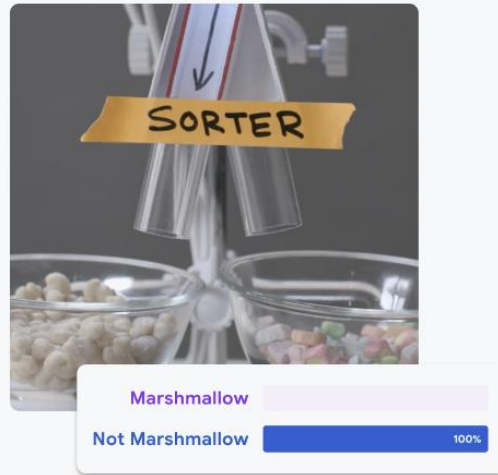
OEFENING : Train je eigen Deep Learning model

Teachable Machine

Train a computer to recognize your own images, sounds, & poses.

A fast, easy way to create machine learning models for your sites, apps, and more – no expertise or coding required.

Get Started



- Groepjes van 4
- Train het model om volgende bewegingen te herkennen:
 - Zwaaien
 - Drinken
 - Boksen
- Na het trainen probeer je modellen van andere groepen uit