

Deep Learning trying to mimic like human

Why DL is Popular?

→ 2005 → Facebook, Instagram, Youtube, WhatsApp
→ LinkedIn, Twitter

→ 2008 → Big data Eng. →

→ 2013 → Companies having huge amount of data
→ AI is popular

Seamless Product

* Hardware Companies (Nvidia) & Google's

DL = computing

Neurons = single neuron.

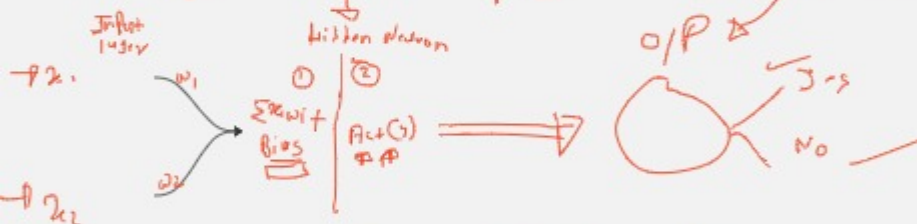
	Study	Playing	Sleep	Pass/Fail
→	7	3	7	1
→	2	5	8	0
→	4	3	7	1



Input layer



Sigmoid = $\frac{1}{1+e^{-x}}$



$$\sum x_i w_i = x_1 w_1 + x_2 w_2 + \text{bias}$$

Activation Function

Sigmoid Act fun: $\frac{1}{1+e^{-x}} = \frac{1}{1+e^{-(\sum x_i w_i + \text{bias})}}$ → $\frac{0}{1}$ $\begin{matrix} \geq 0.5 \Rightarrow 1 \\ < 0.5 \Rightarrow 0 \end{matrix}$

Forward Propagation

