Neural Network Example

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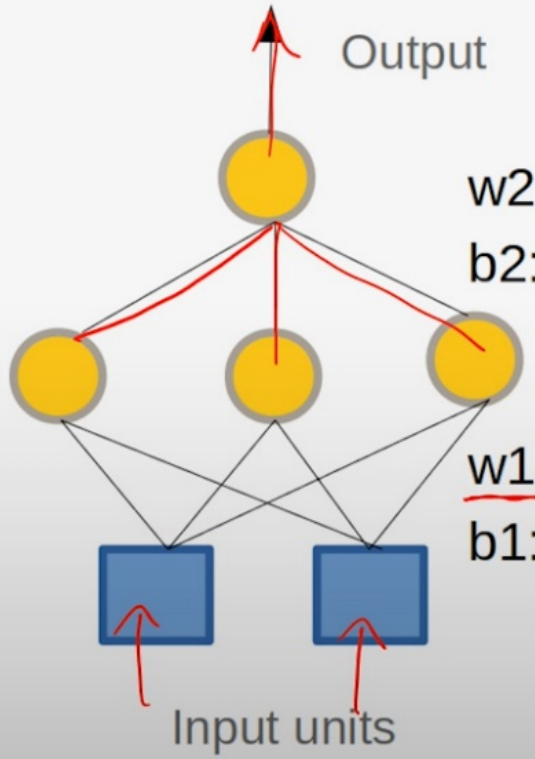
Neural Network Example

Neural Network for Logical and Operation



w2: 3x1 weights
b2: 1x1 bias

w1: 2x3 weights
b1: 1x3 bias

AND	0	1
0	0	0
1	0	1

2 inputs x 3 neurons

Neural Network Parameters

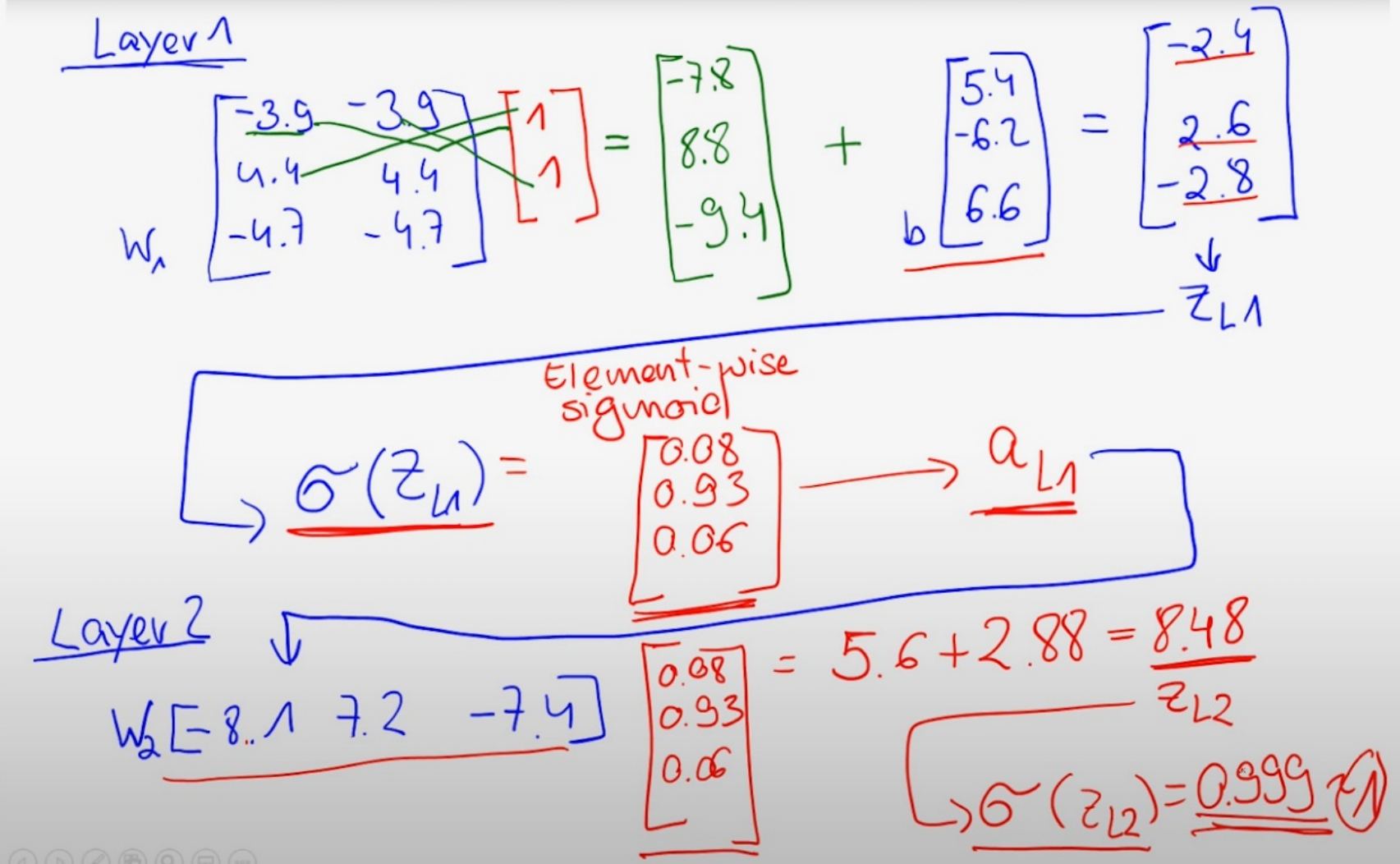
- Parameters for logical and network
- Layer 1

$$W_1 = \begin{bmatrix} -3.929 & -3.945 \\ 4.463 & 4.472 \\ -4.730 & -4.718 \end{bmatrix} \quad \mathbf{b}_1 = \begin{bmatrix} 5.401 \\ -6.226 \\ 6.624 \end{bmatrix}$$

- Layer 2

$$W_2 = [-8.092, 7.240, -7.491] \quad \mathbf{b}_2 = 2.883$$

Neural Network Computations



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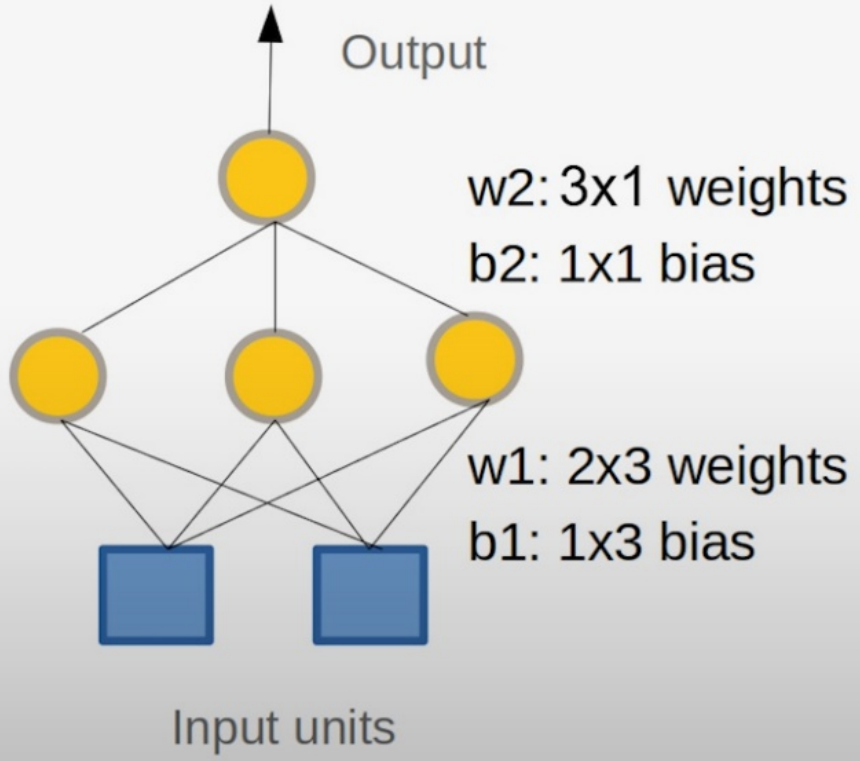
Neural Network for Logical and Operation



AND	0	1
0	0	0
1	0	1