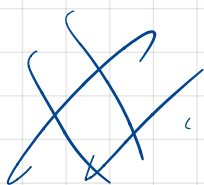


$$f(z) = \begin{cases} 1 & z \geq 0 \\ 0 & z < 0 \end{cases}$$

Perceptron Learning Example - Function AND

Input		Bias Input $x_0 = +1$			Net Sum	Target	Alpha = 0.5		Weight Values		
X1	X2	$1.0 * w_0$	$x_1 * w_1$	$x_2 * w_2$	Input	Output	Actual	Alpha*	w0	w1	w2
						t	0	$\alpha(t - 0)$	0.5	0.5	0.5
0	0	0.5	0	0	0.5	0	1	-0.5	$0.5 + (0.5 \times 1) = 1$	$0.5 + (0.5 \times 0) = 0.5$	$0.5 + (-0.5 \times 0) = 0.5$
0	1	0	0	0.5	0.5	0	1	-0.5	$0 + (-0.5 \times 1) = -0.5$	$0.5 + (-0.5 \times 0) = 0.5$	$0.5 + (-0.5 \times 1) = 0$
1	0	-0.5	0.5	0	0	0	1	-0.5	$0.5 + (-0.5 \times 1) = 0$	$0.5 + (-0.5 \times 0) = 0.5$	$0.5 + (-0.5 \times 0) = 0$
1	1	-1	0	0	-1	1	0	0.5	-0.5	0.5	0.5
0	0	-0.5	0	0	-0.5	0	0	0	0	0.5	0.5
0	1	-0.5	0	0.5	0	0	1	-0.5	-0.5	0.5	0
1	0	-1	0.5	0	-0.5	0	0	0	0	0.5	0
1	1	-1	0.5	0	-0.5	0	0	0.5	0.5	1	0.5
0	0	-0.5	0	0	-0.5	0	0	0	-0.5	1	0.5
0	1	-0.5	0	0.5	0	0	1	-0.5	-1	1	0
1	0	-1	1	0	0	0	1	0.5	-1.5	0.5	0
1	1	-1.5	0.5	0	-1	1	0	0.5	-1	1	0.5
0	0	-1	0	0	-1	0	0	0	-1	1	0.5
0	1	-1	0	0.5	-0.5	0	0	0	-1	1	0.5
1	0	-1	1	0	0	0	1	-0.5	-1.5	0.5	0.5
1	1	-1.5	0.5	1.5	-0.5	1	0	0.5	-1	1	1
0	0	-1	0	0	-1	0	0	0	-1	1	1
0	1	-1	0	1	0	0	1	-0.5	-1.5	1	0.5
1	0	-1.5	1	0	-0.5	0	0	0	-1.5	1	0.5
1	1	-1.5	1	0.5	0	1	1	0	-1.5	1	0.5
0	0	-1.5	0	0	-1.5	0	0	0	-1.5	1	0.5
0	1	-1.5	0	0.5	-1	0	0	0	-1.5	1	0.5
1	0	-1.5	1	0	-0.5	0	0	0	-1.5	1	0.5
1	1	-1.5	1	0.5	0	1	1	0	-1.5	1	0.5

$$\begin{aligned}
 \text{ACC} &= \frac{4+0}{4} \\
 &= 1 \\
 &= 1 \times 100 \\
 &= 100 \%
 \end{aligned}$$



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