

HW 5

$$f(x) \begin{cases} 1; x \geq 0 \\ 0; x < 0 \end{cases}$$

 $x_0 = 1$

Perceptron Learning Example - Function AND											
		Bias Input $x_0 = +1$					Alpha = 0.5				
Input	Input				Net Sum	Target	Actual	Alpha*	Weight Values		
x1	x2	$1.0 * w_0$	$x_1 * w_1$	$x_2 * w_2$	Input	Output	Output	Error	w_0	w1	w2
									0.5	0.5	0.5
0	0	0.5	0	0	0.5	0	1	-0.5	0	0.5	0.5
0	1	0	0	0.5	0.5	0	1	-0.5	-0.5	0.5	0
1	0	-0.5	0.5	0	0	0	1	-0.5	-1	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	-0.5	0.5	0.5
0	1	-0.5	0	0.5	0	0	1	-0.5	-1	0.5	0
1	0	-1	0.5	0	-0.5	0	0	0	-1	0.5	0
1	1	-1	0.5	0	-0.5	1	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	0.5	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