

CSSE 313. Perceptron Learning Worksheet

Trace the perceptron learning algorithm below for one iteration. Assume a learning rate of 0.05 and a step activation function with a threshold of 0.1

```

repeat
  for each  $e$  in examples:
     $in \leftarrow \sum_{j=0..n} W_j x_j[e]$ 
     $Error \leftarrow y[e] - g(in)$ 
     $W_j \leftarrow W_j + \alpha * Error * x_j[e]$ 
until done
    
```

x_1	x_2	w_1	w_2	In	$g(in)$	y	Error	$\alpha * Error * x_1$	$\alpha * Error * x_2$
0	0	0.1	0.1						
0	1								
1	0								
1	1								