

Perceptron

Perceptron Algorithm

Input: A set of examples, $(x_1, y_1), \dots, (x_n, y_n)$

Output: A perceptron defined by (w_0, w_1, \dots, w_d)

Begin

2. Initialize the weights w_j to 0 $\forall j \in \{0, \dots, d\}$
3. Repeat until convergence
4. For each example $x_i \forall i \in \{1, \dots, n\}$
5. if $y_i f(x_i) \leq 0$ #an error?
6. update all w_j with $w_j := w_j + y_i x_i$ #adjust the weights

End