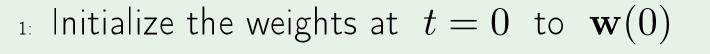
Logistic regression algorithm



2: for
$$t = 0, 1, 2, \dots$$
 do

$$\nabla E_{\text{in}} = -\frac{1}{N} \sum_{n=1}^{N} \frac{y_n \mathbf{x}_n}{1 + e^{y_n \mathbf{w}^{\mathsf{T}}(t) \mathbf{x}_n}}$$

4 Update the weights: $\mathbf{w}(t+1) = \mathbf{w}(t) - \eta \nabla E_{\mathrm{in}}$

- 5: Iterate to the next step until it is time to stop
- 6: Return the final weights ${f w}$

