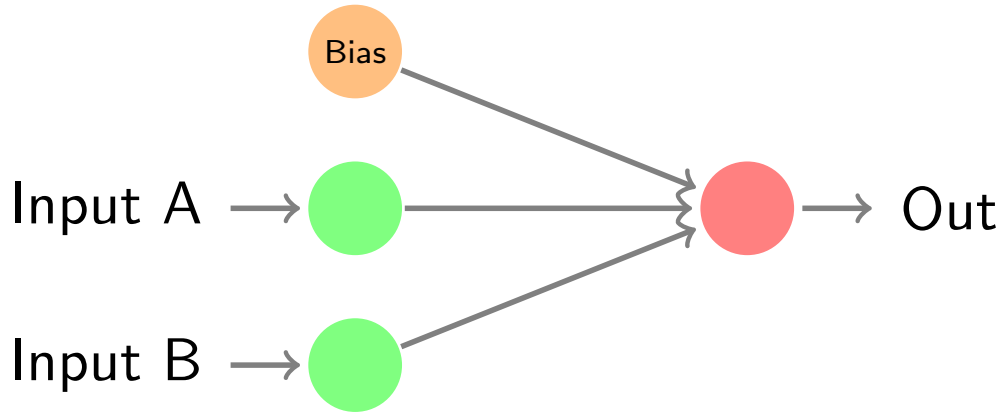

$$\nabla_{\vec{w}} E(\vec{w}, b) = \sum_i (\vec{w}^T \vec{x}^{(i)} + b - y^{(i)}) \vec{x}^{(i)T}$$

$$\nabla_b E(\vec{w}, b) = \sum_i^{n_x} \vec{w}^T \vec{x}^{(i)} + b - y^{(i)}$$

$$a(\vec{x}) = \vec{w}^T \vec{x} + b = \begin{pmatrix} w_1 & w_2 \end{pmatrix} \begin{pmatrix} x_A \\ x_B \end{pmatrix} + b$$

Error $E(\vec{w})$

Sample Input

$\sum_i (\vec{w}^1)^T \vec{x}^{(i)} + b$ — weighted sum

activation fct

Predicted Output − *Sample Label*

Score

Forward = Computation