

Formação Cientista de Dados

Funções de Ativação





Função de Ativação

"Define" se o sinal
será propagado
pela rede

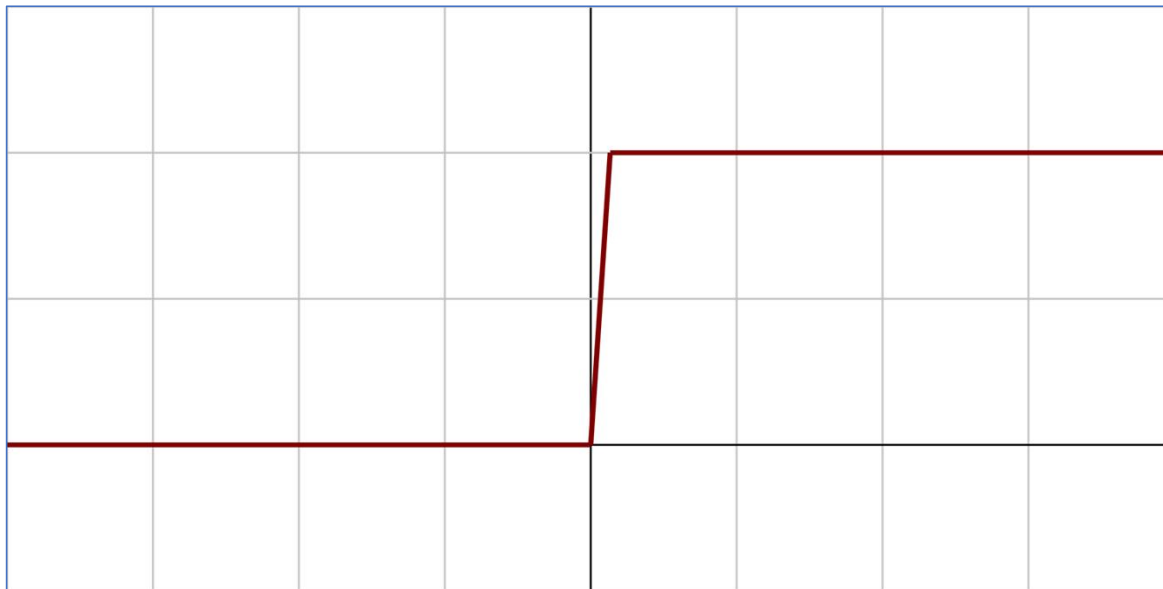
Da a RNA a não
linearidade

Principais

- Threshold
- Sigmoid
- Relu (Rectified Linear Unit)
- Ranh (Hyperbolic tangent activation function)

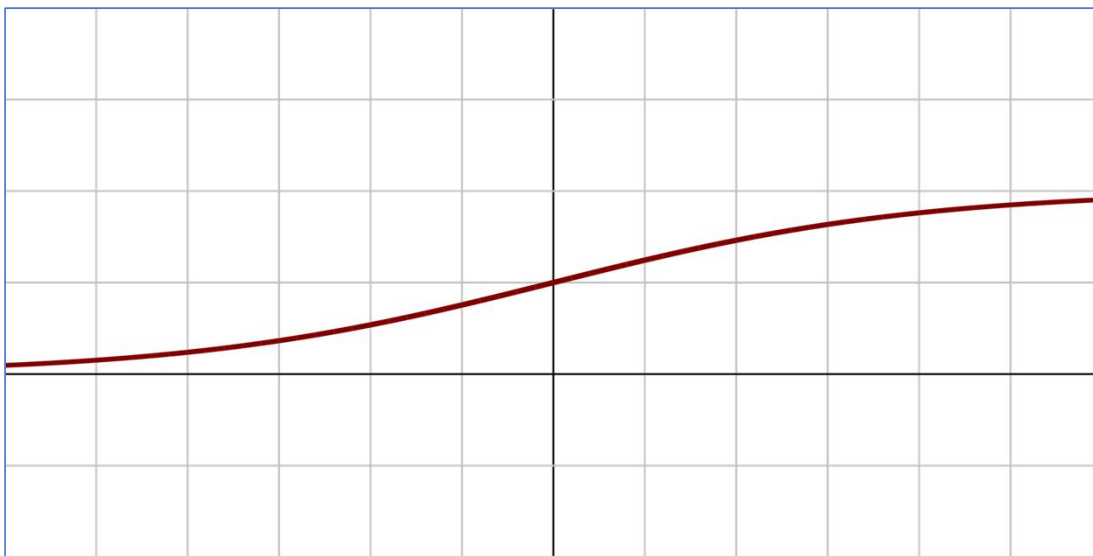


Threshold (Binary Step)



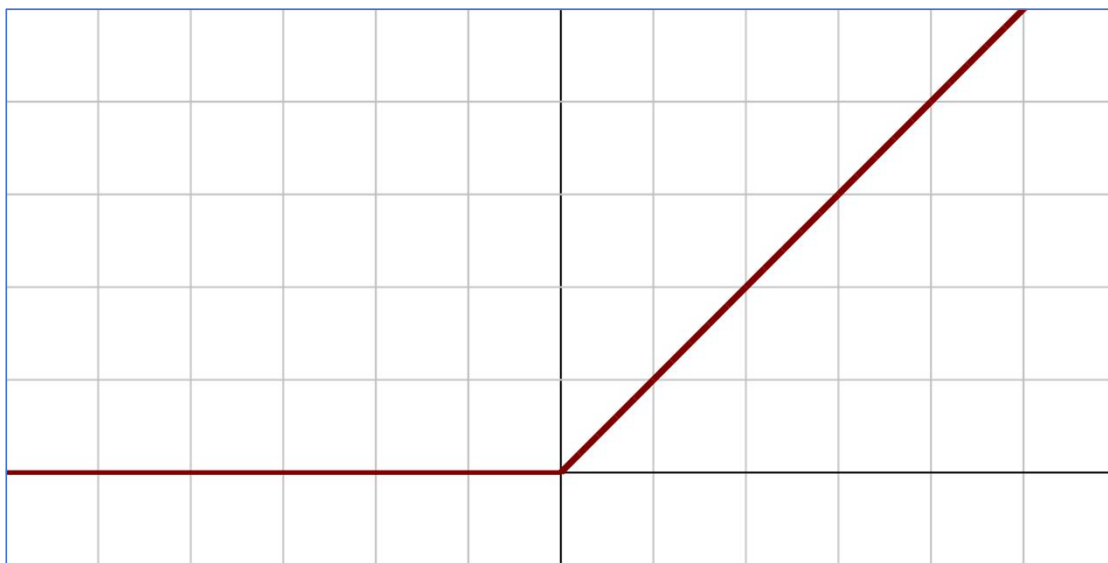
$$f(x) = \begin{cases} 0 & \text{for } x < 0 \\ 1 & \text{for } x \geq 0 \end{cases}$$

Sigmoid



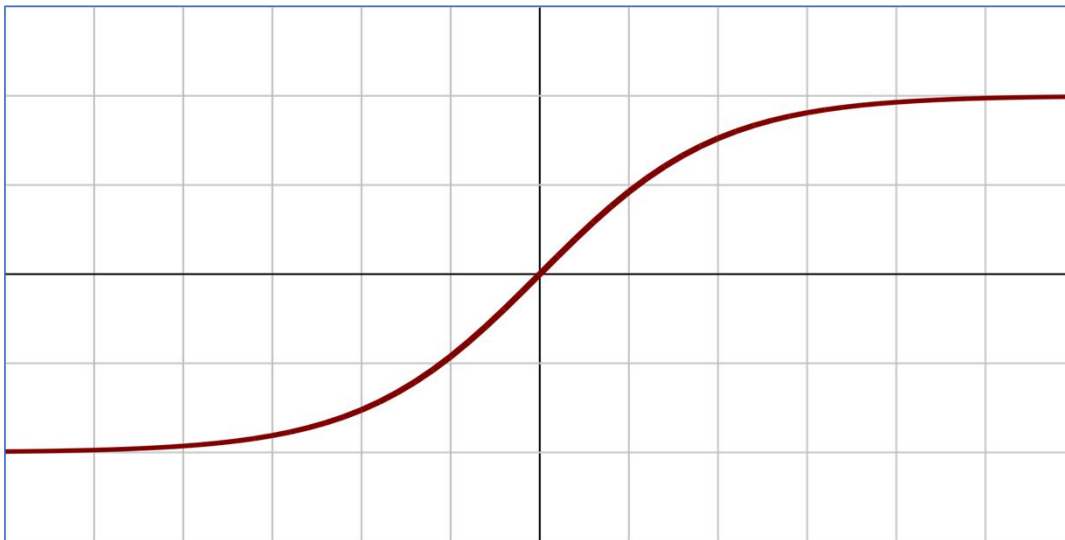
$$f(x) = \sigma(x) = \frac{1}{1 + e^{-x}}$$

Relu (Rectified Linear Unit)



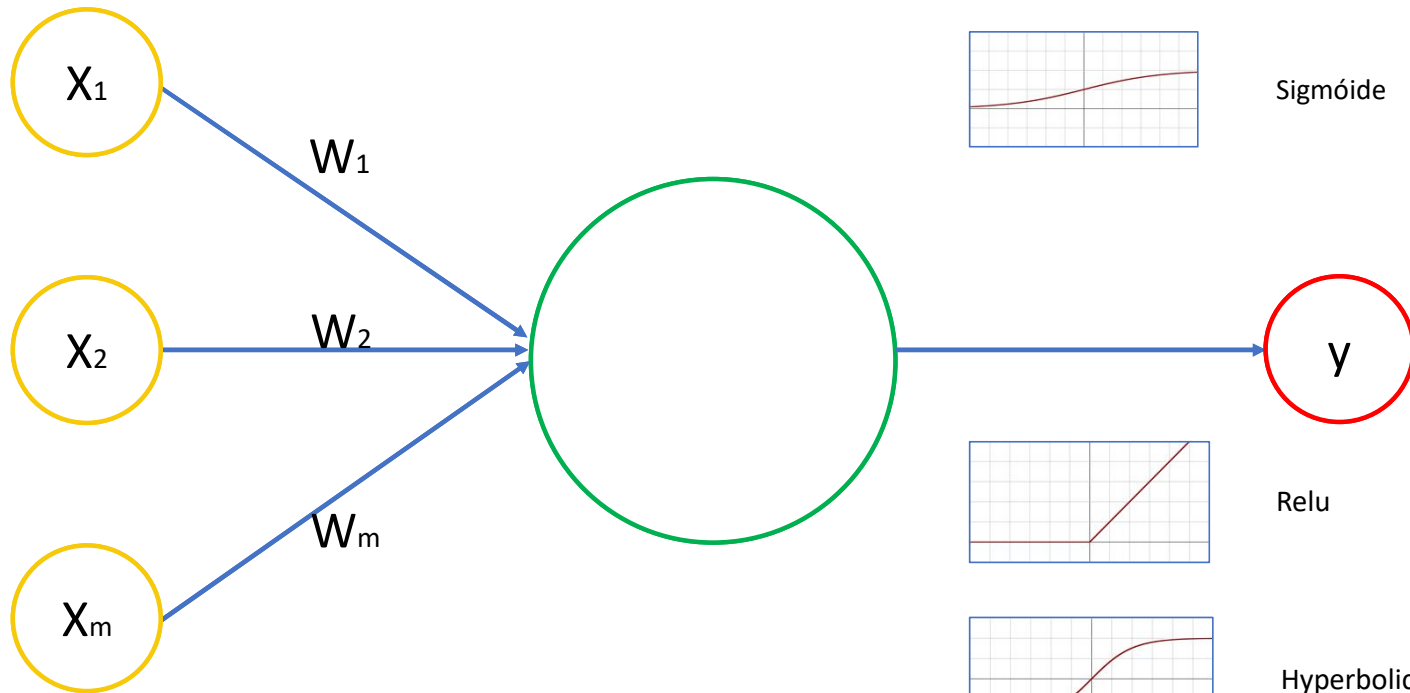
$$f(x) = \begin{cases} 0 & \text{for } x \leq 0 \\ x & \text{for } x > 0 \end{cases}$$

Hyperbolic Tangent (tanh)



$$f(x) = \tanh(x) = \frac{e^x - e^{-x}}{e^x + e^{-x}}$$

A função de ativação



Threshold



Sigmóide



Relu



Hyperbolic Tangent



A função de ativação

