- The sigmoid function (or logistic)

$$f(x) = \frac{1}{1+exp(-x)}$$

- The hyperbolic tangent function ("tanh")

$$\phi(x) = \frac{exp(x)-exp(-x)}{exp(x)+exp(-x)} = \frac{exp(2x)-1}{exp(2x)+1}$$

- The hard threshold function

$$\phi\beta(x) = 1x \geq \beta$$

- The Rectified Linear Unit (ReLU) activation function

$$\phi(x) = max(0, x)$$

- Here is a schematic representation of an artificial neuron where

The figure 2 represents the activation function describes above
[width=15cm,]