

Επανάληψη 1

$$W1 = 0$$

$$W2 = 0$$

$$a = x1*w1 + x2*w2$$

Πλειάδα π1

$$(0,0) \rightarrow 0$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0 + 0*0) = f(0) = 0$$

$$E_{\pi1} = |y - y'| = 0-0=0$$

Πλειάδα π2

$$(0,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0 + 1*0) = f(0) = 0$$

$$E_{\pi2} = |y - y'| = 1-0=1$$

Πλειάδα π3

$$(1,0) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0+0*0) = f(0) = 0$$

$$E_{\pi2} = |y - y'| = 1-0=1$$

Πλειάδα π4

$$(1,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0+1*0) = f(0) = 0$$

$$E_{\pi2} = |y - y'| = 1-0=1$$

$$E = E_{\pi1} + E_{\pi2} + E_{\pi3} + E_{\pi4} = 0 + 1 + 1 + 1 = 3$$

$$E = \frac{3}{4} = 0,75 = 75\%$$

Επανάληψη 2

$$W1 = 0.25$$

$$W2 = 0.25$$

$$a = x1*w1 + x2*w2$$

Πλειάδα π1

$$(0,0) \rightarrow 0$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0.25 + 0*0.25) = f(0) = 0$$

$$E_{\pi1} = |y - y'| = 0-0=0$$

Πλειάδα π2

$$(0,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0.25 + 1*0.25) = f(0.25) = 0$$

$$E_{\pi2} = |y - y'| = 1-0=1$$

Πλειάδα π3

$$(1,0) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0.25+0*0.25) = f(0.25) = 0$$

$$E_{\pi2} = |y - y'| = 1-0=1$$

Πλειάδα π4

$$(1,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0.25+1*0.25) = f(0.50) = 1$$

$$E_{\pi2} = |y - y'| = 1-1=0$$

$$E = E_{\pi1}+E_{\pi2}+E_{\pi3}+E_{\pi4}=0+1+1+0=2$$

$$E = 2/4 = 0,50 = 50\%$$

Επανάληψη 3

$$W1 = 0.50$$

$$W2 = 0.50$$

$$a = x1*w1 + x2*w2$$

Πλειάδα π1

$$(0,0) \rightarrow 0$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0.50 + 0*0.50) = f(0) = 0$$

$$E_{\pi1} = |y - y'| = 0-0=0$$

Πλειάδα π2

$$(0,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(0*0.50 + 1*0.50) = f(0.50) = 1$$

$$E_{\pi2} = |y - y'| = 1-1=0$$

Πλειάδα π3

$$(1,0) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0.50+0*0.50) = f(0.50) = 1$$

$$E_{\pi2} = |y - y'| = 1-1=0$$

Πλειάδα π4

$$(1,1) \rightarrow 1$$

$$y' = f(a) = f(x1*w1+x2*w2) = f(1*0.50+1*0.50) = f(1) = 1$$

$$E_{\pi2} = |y - y'| = 1-1=0$$

$$E = E_{\pi1} + E_{\pi2} + E_{\pi3} + E_{\pi4} = 0+0+0+0=0$$