

inputs

sum for  
each class

K outputs

$1 = X_0$

$X_1$

$\vdots$

$X_p$

$w_{1,0}$

$w_{1,1}$

$w_{1,p}$

$w_{2,0}$

$w_{K,0}$

$w_{K,1}$

$w_{K,p}$

weights

$\Sigma$

$\Sigma$

$\vdots$

$\Sigma$

soft(arg)max

non-linear

$\vdots$