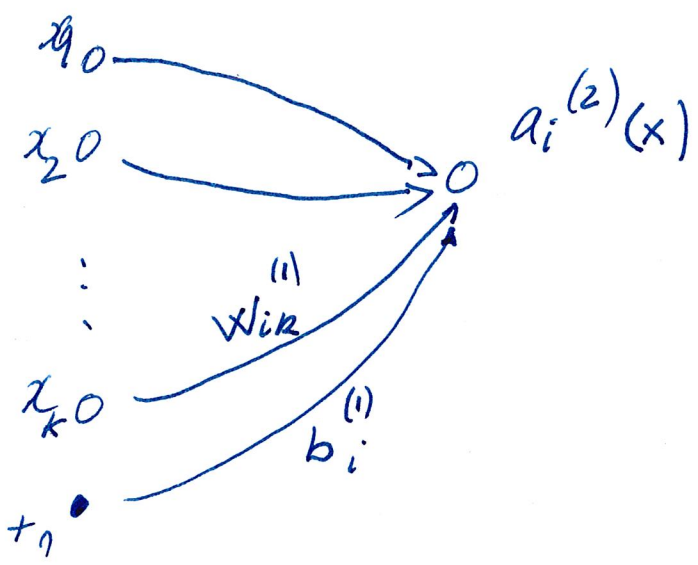


new features = raw features



$x = [x_1, x_2, \dots, x_k]$

$\hat{x} = \underset{\|x\|=1}{\text{arg max}} a_i^{(2)}(x)$
 $= \underset{\|x\|=1}{\text{arg max}} z_i^{(2)}(x)$
 $\hookrightarrow \sigma(z_i^{(2)}(x))$ trained, fixed
 $\hookrightarrow \sum_{j=1}^k w_{ij} x_j$

subj. to: $\sum_{j=1}^k x_j^2 = 1$