

D18



Cajamarca, 10 de noviembre de 2018
NEURAL NETWORK (CLASSIFICATION)

$L = 4$ = total layers

$s_L = \# \text{ neurons in layer } L \text{ (without bias)}$

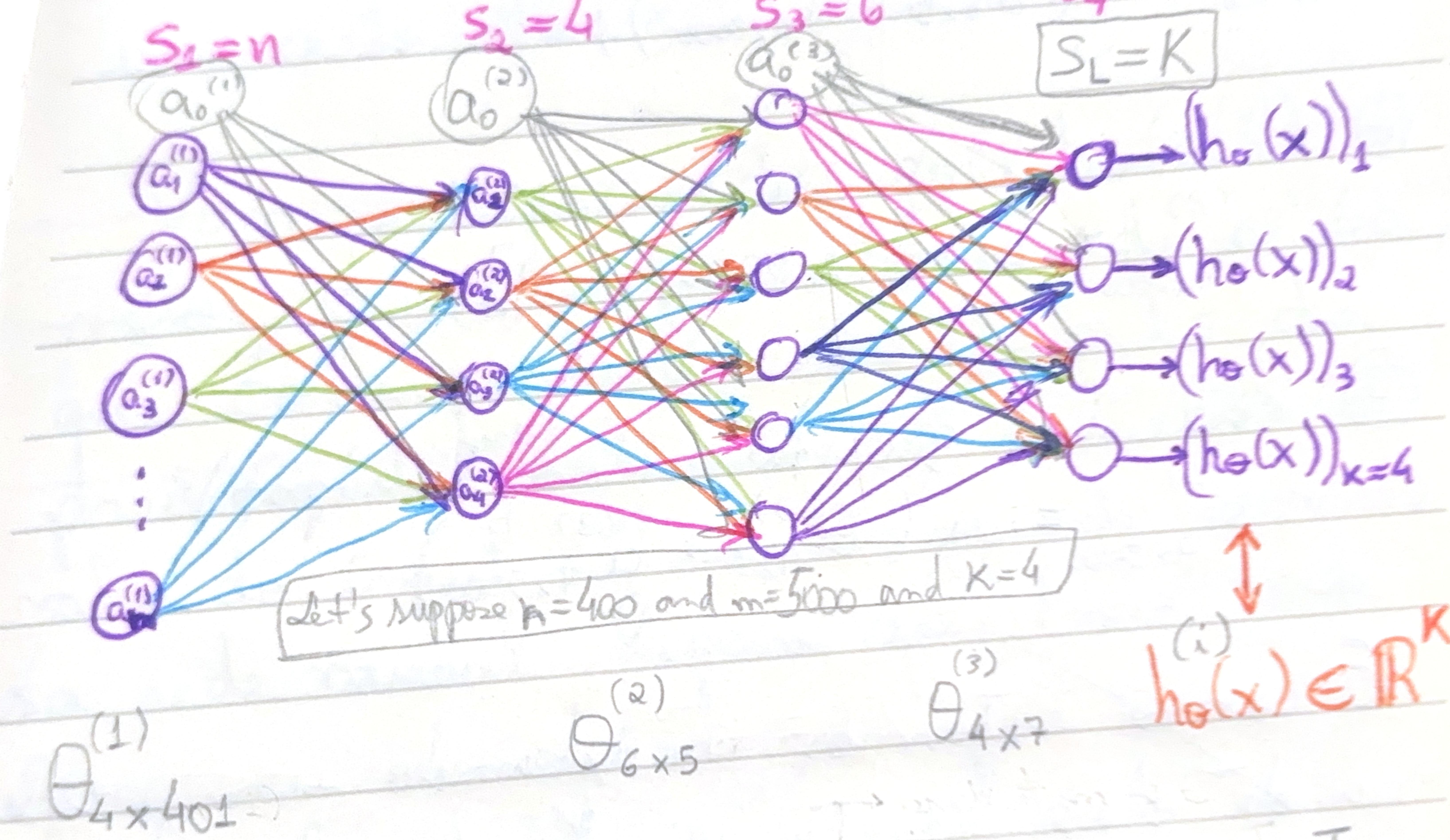
$$s_1 = n$$

$$s_2 = 4$$

$$s_3 = 6$$

$$s_4 = 4$$

$$s_L = K$$



- ① input: $X_{5000 \times 400}$ transpor $\rightarrow a^{(1)} = X^T$
 p/ começar com 400×5000
 features na vertical, como
 na rede neural
- ② adicionar bias unitário: $a_{401 \times 5000}^{(1)} = [\underbrace{\text{ones}(1, 5000)}_{\text{linha de 1's}}; a^{(1)}]$