



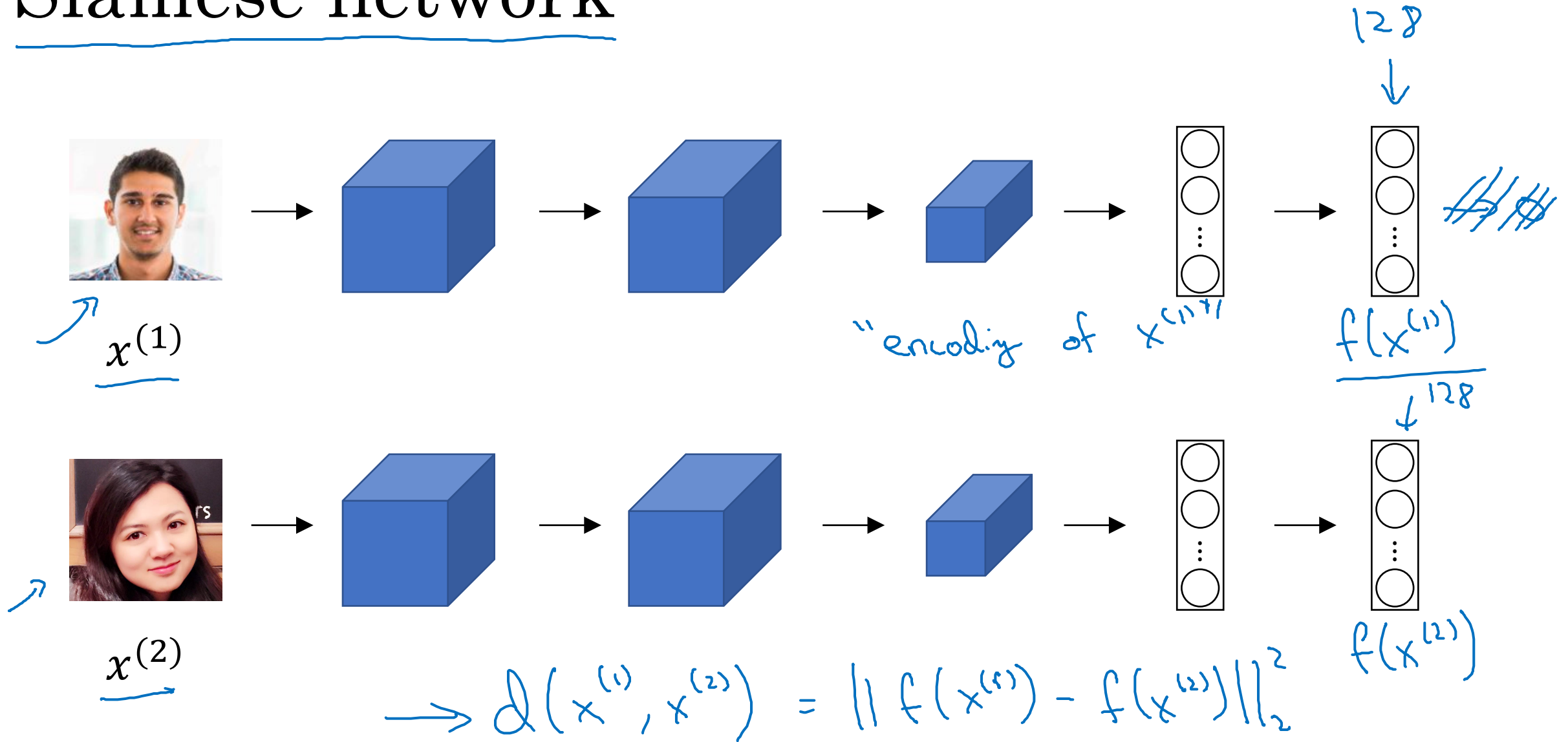
deeplearning.ai

# Face recognition

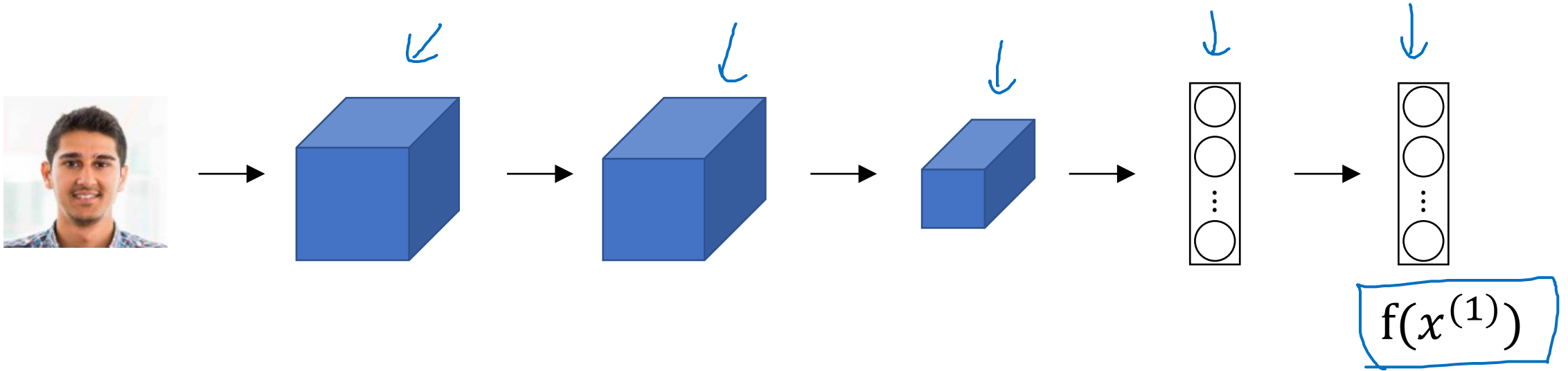
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# Siamese network

# Siamese network



# Goal of learning



Parameters of NN define an encoding  $f(x^{(i)})$

Learn parameters so that:

If  $x^{(i)}, x^{(j)}$  are the same person,  $\|f(x^{(i)}) - f(x^{(j)})\|^2$  is small.

If  $x^{(i)}, x^{(j)}$  are different persons,  $\|f(x^{(i)}) - f(x^{(j)})\|^2$  is large.