

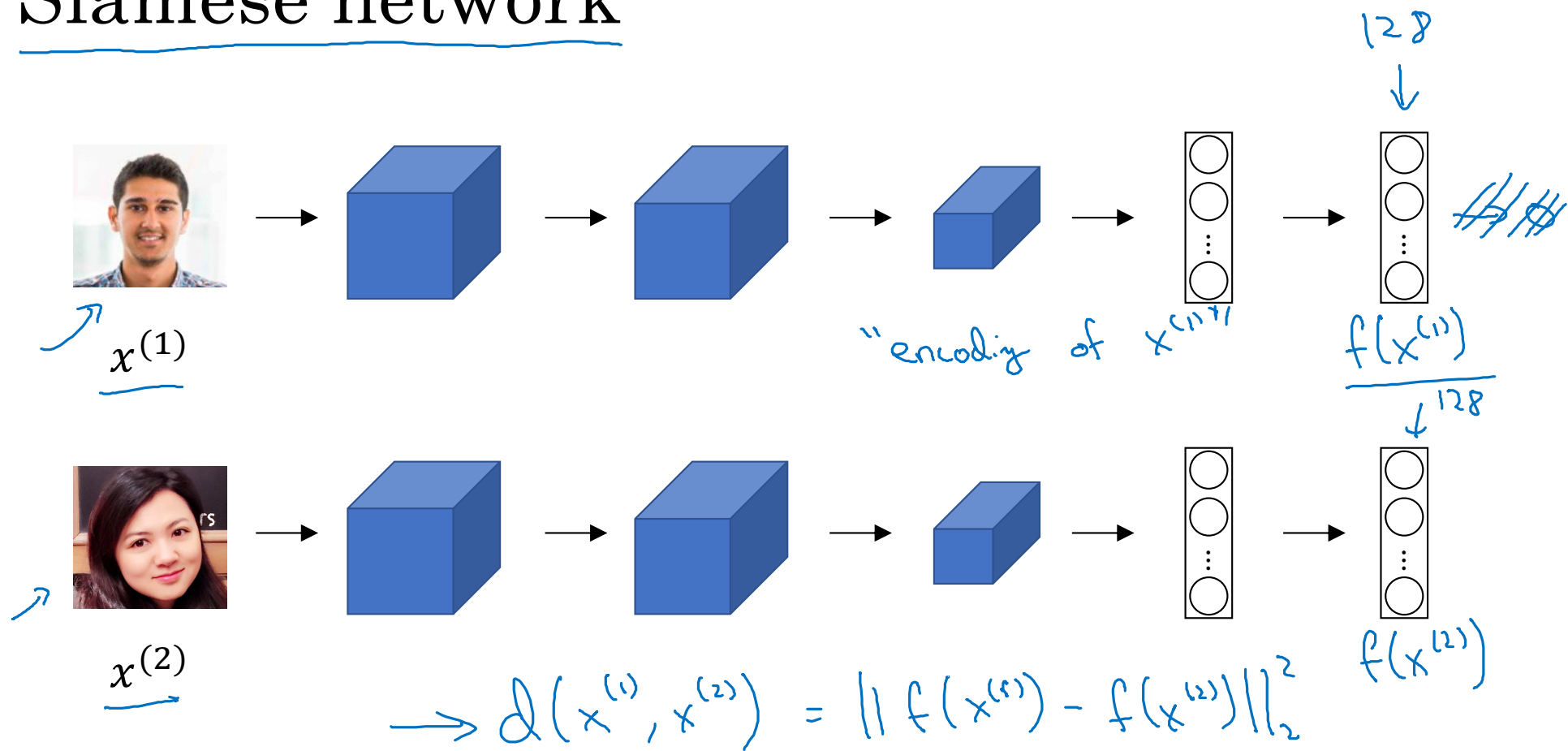


deeplearning.ai

Face recognition

Siamese network

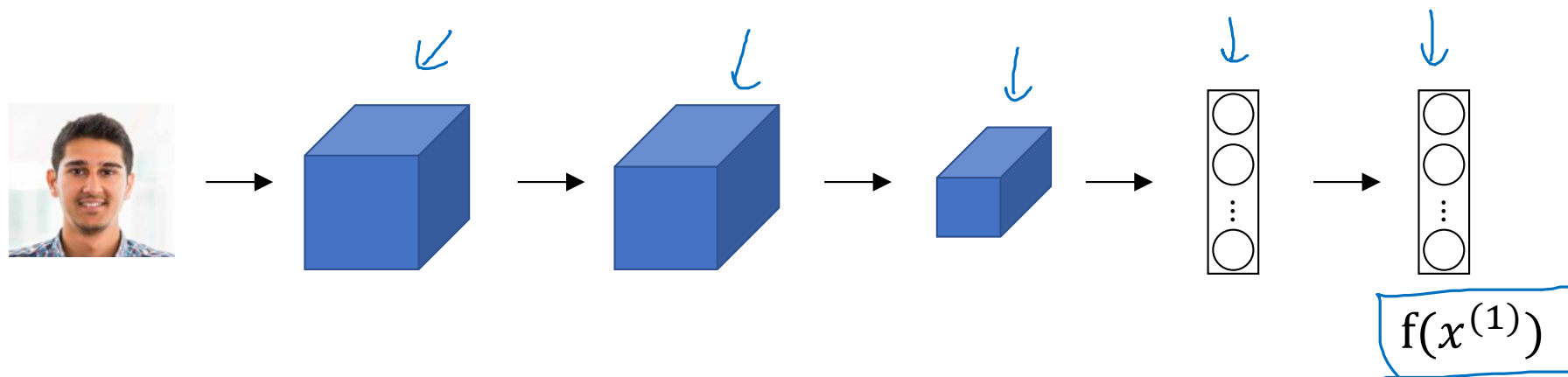
Siamese network



[Taigman et. al., 2014. DeepFace closing the gap to human level performance]

Andrew Ng

Goal of learning



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

128

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.