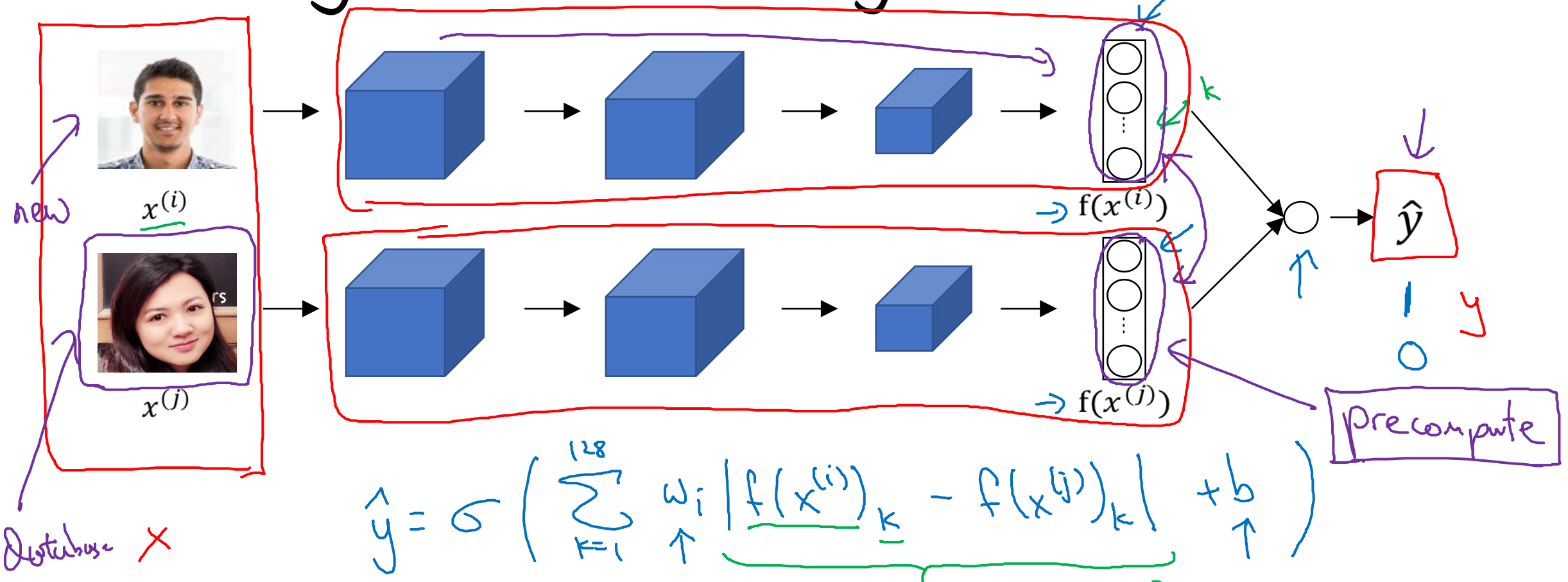
deeplearning.ai

Face recognition

Face verification and binary classification

Learning the similarity function

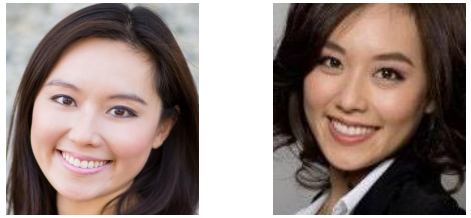


$$\hat{y} = \sigma\left(\sum_{k=1}^{128} w_i \left| f(x^{(i)})_k - f(x^{(j)})_k \right| + b\right)$$

$$\frac{\left(f(x^{(i)})_k - f(x^{(j)})_k\right)^2}{f(x^{(i)})_k + f(x^{(j)})_k} \qquad \chi^2$$

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

Face verification supervised learning

x	y	
	1	"Same"
	0	"Albert"
	0	
	1	

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