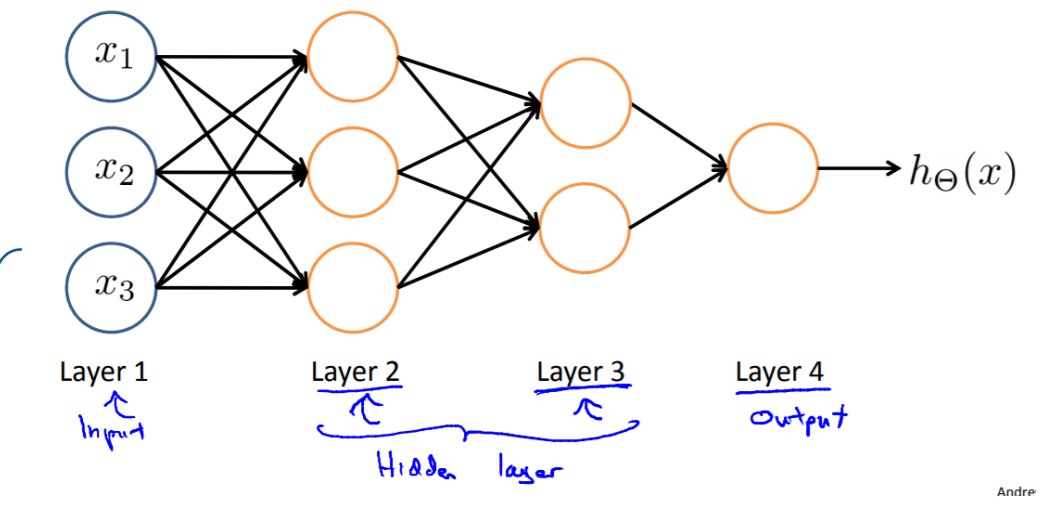
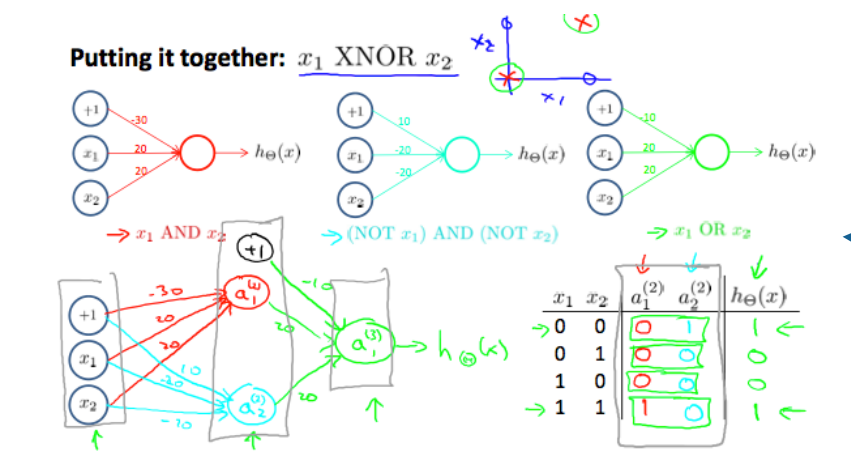


神经网络初识

本质上通过数据学习的是逻辑关系

表示



Forward propagation: Vectorized implementation

$$x = \begin{bmatrix} x_0 \\ x_1 \\ x_2 \\ x_3 \end{bmatrix} \quad z^{(2)} = \begin{bmatrix} z_1^{(2)} \\ z_2^{(2)} \\ z_3^{(2)} \end{bmatrix}$$

$$a^{(2)} = g(z^{(2)})$$

Add $a_0^{(2)} = 1$ → $a^{(2)}$

$$z^{(3)} = \Theta^{(2)} a^{(2)}$$

$$h_{\Theta}(x) = a^{(3)} = g(z^{(3)})$$

Handwritten notes: $a_1^{(2)} = g(z_1^{(2)})$, $a_2^{(2)} = g(z_2^{(2)})$, $a_3^{(2)} = g(z_3^{(2)})$