



$$x \in \mathbb{R}^2$$

$$h^{(1)} \in \mathbb{R}^{256}$$

$$h^{(2)} \in \mathbb{R}^{256}$$

$$y \in \mathbb{R}^1$$

$$\Theta^{(1)} \in \mathbb{R}^{256 \times 2}$$

$$\Theta^{(2)} \in \mathbb{R}^{256 \times 256}$$

$$256 \times 2 \odot 2 \times 256 = h^{(2)}$$

$$256 \times 256$$

$$\Theta^{(3)} \in \mathbb{R}^{256 \times 1}$$

$$\Theta^{(3)} \in \mathbb{R}^{256 \times 1}$$