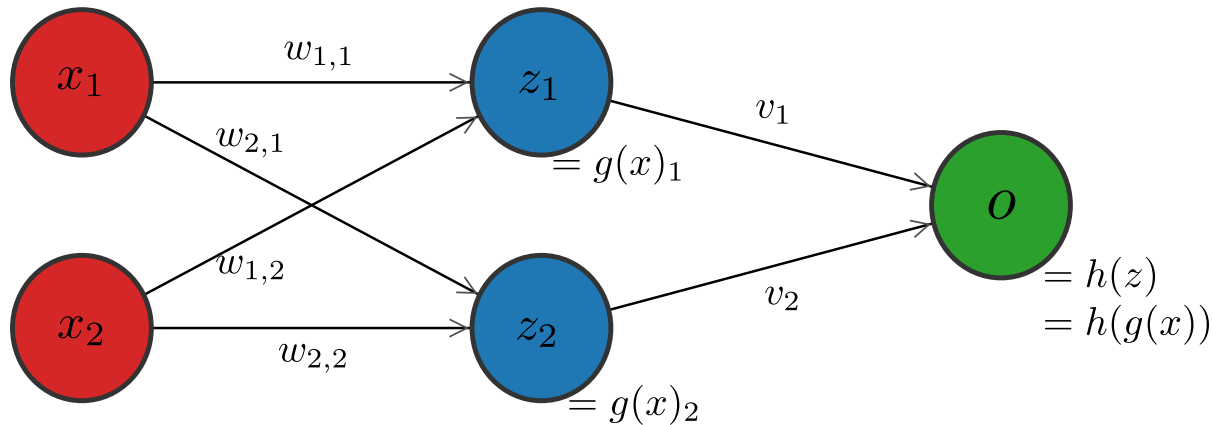


Input layer

Hidden layer

Output layer



$$x = \begin{pmatrix} x_1 \\ x_2 \end{pmatrix} \in \mathbb{R}^2$$

$$\begin{aligned} g : \mathbb{R}^2 &\rightarrow \mathbb{R}^2, \\ x &\mapsto \phi.(Wx) \\ &= \phi.\left(\begin{pmatrix} w_{1,1} & w_{1,2} \\ w_{2,1} & w_{2,2} \end{pmatrix} \begin{pmatrix} x_1 \\ x_2 \end{pmatrix}\right) \end{aligned}$$

$$\begin{aligned} h : \mathbb{R}^2 &\rightarrow \mathbb{R}, \\ z &\mapsto \psi.(Vz) \\ &= \psi.\left(\begin{pmatrix} v_1 & v_2 \end{pmatrix} \begin{pmatrix} z_1 \\ z_2 \end{pmatrix}\right) \end{aligned}$$