Weight Matrix

weights out →

weights in ↓

stored weights

$$\begin{bmatrix} \mathbf{0} & \begin{array}{|c|c|} \hline \text{input nodes connected to hidden nodes} & \text{input nodes directly connected to output} \\ \hline \end{array} \\ \mathbf{0} & \begin{array}{cc} \text{connections between hidden nodes} & \text{hidden nodes connected to output} \end{array} \\ \mathbf{0} & \mathbf{0} \quad \mathbf{0} \end{bmatrix}$$

input nodes connected to hidden nodes

input nodes directly connected to output

connections between hidden nodes

(nodes can only be connected to nodes which appear later in topological order)

hidden nodes connected to output

input + bias

hidden nodes

output

input + bias
(all)

hidden nodes
(only relevant ones, topologically sorted)

output
(all)