

$$\begin{array}{c}
\text{Scalar} \\
\left[\begin{array}{c} y_j^{(1)} \\ \vdots \\ y_j^{(s)} \end{array} \right] = \underbrace{A_j}_{\mathbb{R}^{s \times h}} \cdot \underbrace{\left[\begin{array}{c} x_1 \\ \vdots \\ x_h \end{array} \right]}_{\mathbb{R}^h_{qs}} \quad \Bigg| \quad \text{Vector} \\
\left[\begin{array}{c} \underline{y}_j^{(1)} \\ \vdots \\ \underline{y}_j^{(s)} \end{array} \right] = \underbrace{A_j}_{\mathbb{R}^{st \times th}_q} \cdot \underbrace{\left[\begin{array}{c} \underline{x}_1 \\ \vdots \\ \underline{x}_h \end{array} \right]}_{\mathbb{R}^{th}_q}
\end{array}$$