

$$\textcolor{teal}{W}_{:,1}^T \quad \textcolor{teal}{W}_{k,1}^T \quad \textcolor{teal}{W}'_{:,1}^T$$

$$\textcolor{brown}{W}_{:,2}^T \quad \textcolor{brown}{W}_{k,2}^T \quad \textcolor{brown}{W}'_{:,\frac{V}{2}}^T$$

$$\textcolor{violet}{W}_{:,3}^T \quad \textcolor{violet}{W}_{k,3}^T \quad \textcolor{violet}{W}'_{:,V}^T$$

$$W^T \quad W_{1,:}^T \quad W_{k,:}^T \quad W_{V,:}^T \quad W_{2,:}^T \quad W_{V-1,:}^T \quad W'_{1,:}^T \quad W'_{2,:}^T \quad W'_{3,:}^T$$

$$\textcolor{teal}{W}_{1,1}^T 0 + \ldots + \textcolor{teal}{W}_{k,1}^T 1 + \ldots + \textcolor{teal}{W}_{V,1}^T 0$$

$$\textcolor{brown}{W}_{1,2}^T 0 + \ldots + \textcolor{brown}{W}_{k,2}^T 1 + \ldots + \textcolor{brown}{W}_{V,2}^T 0$$

$$\textcolor{violet}{W}_{1,3}^T 0 + \ldots + \textcolor{violet}{W}_{k,3}^T 1 + \ldots + \textcolor{violet}{W}_{V,3}^T 0$$

$$x^1 \quad x_1^1 \quad x_1^i \quad x_1^C$$

$$x^i \quad x_k^1 \quad x_k^i \quad x_k^C$$

$$x^C \quad x_V^1 \quad x_V^i \quad x_V^C$$

$$\frac{1}{C}$$

$$\frac{1}{C} \sum_{i=1}^C x^i$$

$$\frac{1}{C} \sum_{i=1}^C x_1^i$$

$$\frac{1}{C} \sum_{i=1}^C x_k^i$$

$$\frac{1}{C} \sum_{i=1}^C x_V^i$$

$$\textcolor{teal}{W}_{1,1}^T \left(x_1^1 + \ldots + x_1^C\right) + \ldots + \textcolor{teal}{W}_{k,1}^T \left(x_k^1 + \ldots + x_k^C\right) + \ldots + \textcolor{teal}{W}_{V,1}^T \left(x_V^1 + \ldots + x_V^C\right)$$

$$\textcolor{brown}{W}_{1,2}^T \left(x_1^1 + \ldots + x_1^C\right) + \ldots + \textcolor{brown}{W}_{k,2}^T \left(x_k^1 + \ldots + x_k^C\right) + \ldots + \textcolor{brown}{W}_{V,2}^T \left(x_V^1 + \ldots + x_V^C\right)$$

$$\textcolor{violet}{W}_{1,3}^T \left(x_1^1 + \ldots + x_1^C\right) + \ldots + \textcolor{violet}{W}_{k,3}^T \left(x_k^1 + \ldots + x_k^C\right) + \ldots + \textcolor{violet}{W}_{V,3}^T \left(x_V^1 + \ldots + x_V^C\right)$$

$$\textcolor{teal}{W}_{k,1}^1{}^T x_k^1 + \textcolor{teal}{W}_{k,1}^2{}^T x_k^2 + \ldots + \textcolor{teal}{W}_{k,1}^C{}^T x_k^C$$

$$\textcolor{brown}{W}_{k,2}^1{}^T x_k^1 + \textcolor{brown}{W}_{k,2}^2{}^T x_k^2 + \ldots + \textcolor{brown}{W}_{k,2}^C{}^T x_k^C$$

$$\textcolor{violet}{W}_{k,3}^1{}^T x_k^1 + \textcolor{violet}{W}_{k,3}^2{}^T x_k^2 + \ldots + \textcolor{violet}{W}_{k,3}^C{}^T x_k^C$$

$$\frac{1}{C} \sum_{i=1}^C \textcolor{teal}{W}_{k,1}^i{}^T$$

$$\frac{1}{C} \sum_{i=1}^C \textcolor{brown}{W}_{k,2}^i{}^T$$

$$\frac{1}{C} \sum_{i=1}^C \textcolor{violet}{W}_{k,3}^i{}^T$$

$$W^T$$