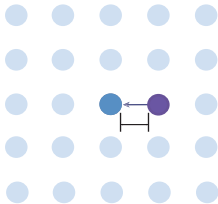
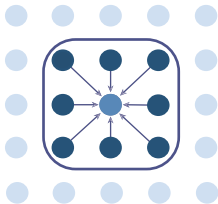


*RBF Scores of Token  $x_i$*



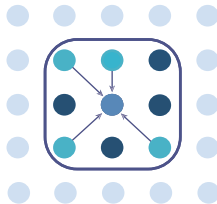
$$s_{i,j} = \exp \left( -\frac{\|Qx_i(t) - Kx_j(t)\|^2}{2\sigma^2} \right)$$

*Local Interaction In  $\mathcal{N}_i$*



$$s_{i,j} = 0 \quad \text{if } j \notin \mathcal{N}_i$$

*Selective Interaction In  $\xi_i^k$*



$$\begin{aligned} \xi_i^k &= \text{TopK}(s_{i,\mathcal{N}_i}, k) \\ s_{i,j} &= 0 \quad \text{if } j \notin \xi_i^k \end{aligned}$$

● Token  $x_i$   
 ● Token  $x_j$   
 ● Tokens in  $\mathcal{N}_i$   
 ● Tokens Selected  
   Local Interaction Area  $\mathcal{N}_i$