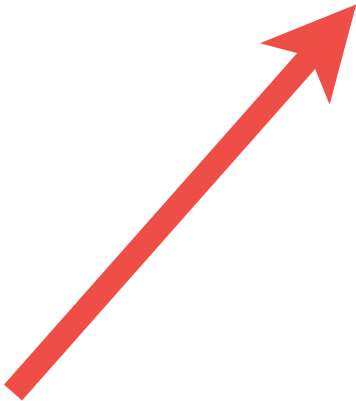


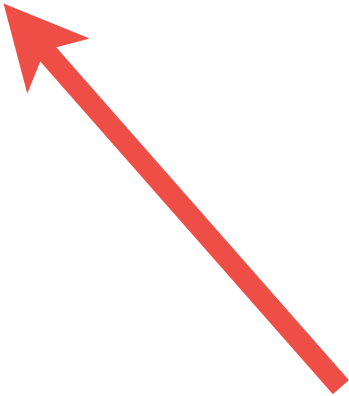
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Parameter Symmetrization

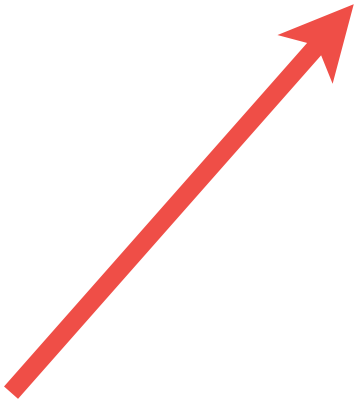


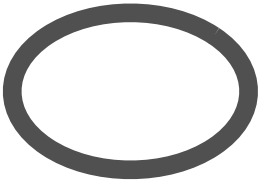


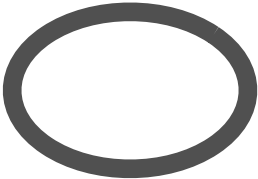


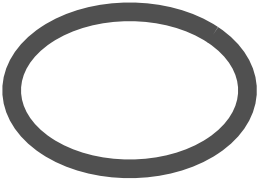








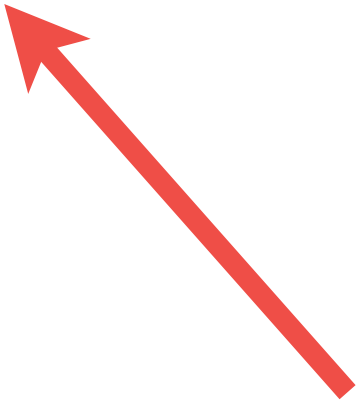


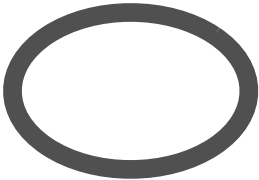


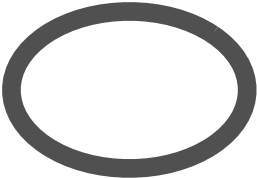


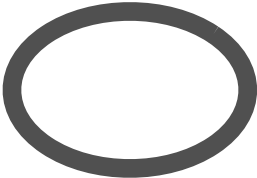


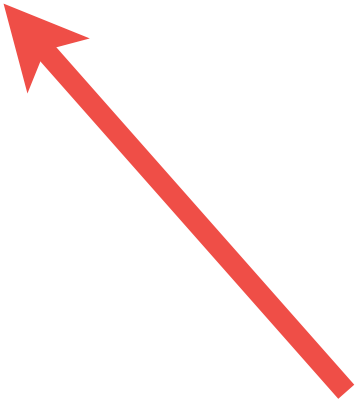


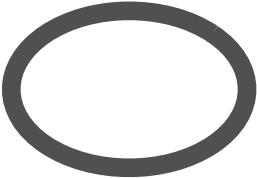


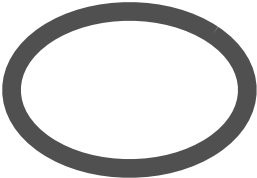


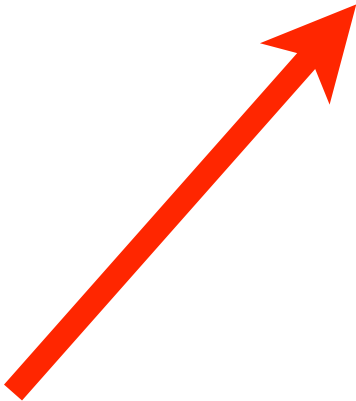




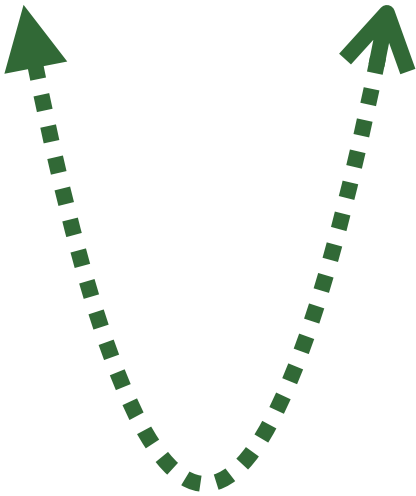








$$a_{ij} = \begin{cases} c_{|i-j|} & |j-i| < \frac{s}{2} \\ 0 & \text{o.w} \end{cases}$$



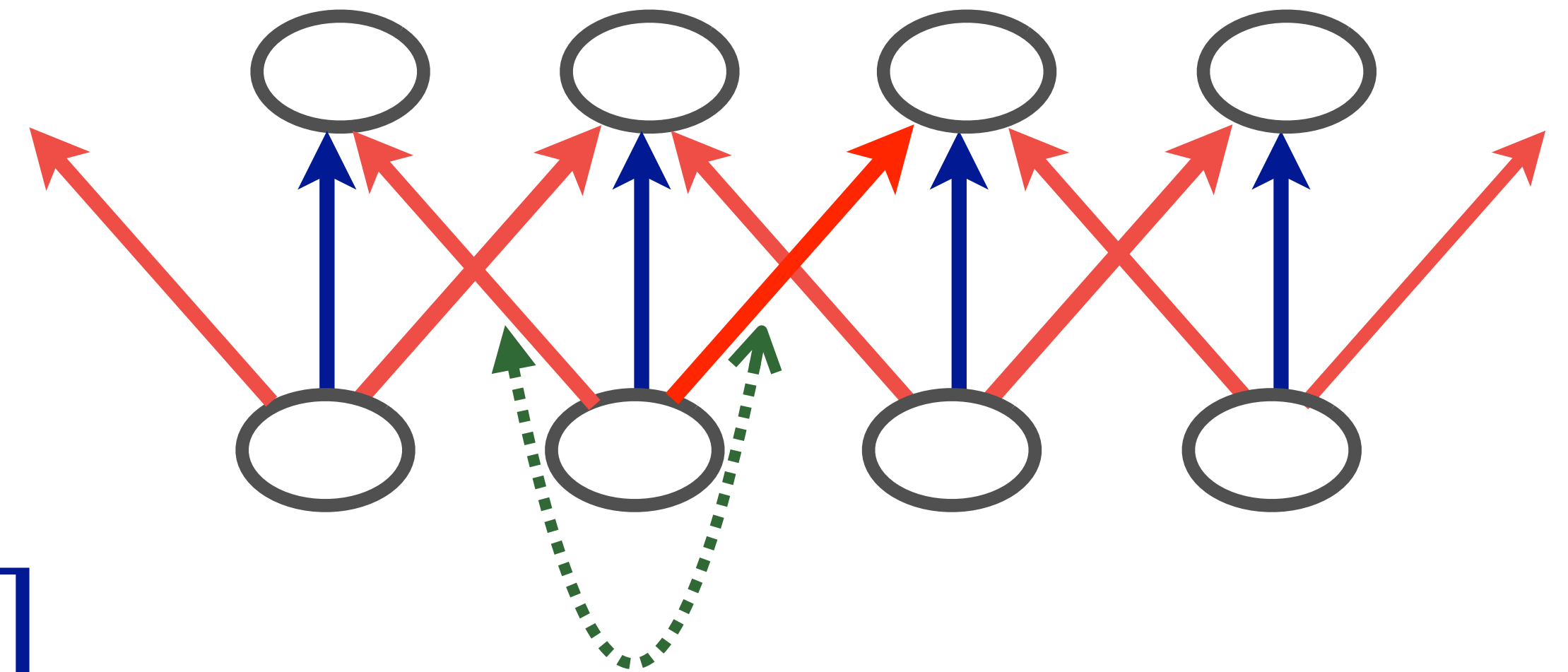
$$\begin{bmatrix} c_1 & c_2 & c_1 & 0 & 0 & 0 & 0 & 0 \\ 0 & c_1 & c_2 & c_1 & 0 & 0 & 0 & 0 \\ 0 & 0 & c_1 & c_2 & c_1 & 0 & 0 & 0 \\ 0 & 0 & 0 & c_1 & c_2 & c_1 & 0 & 0 \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \end{bmatrix}$$

$$h_{i}^{r+1} = \sigma \left(\sum_{j=0}^s c_j \frac{h_{i-j}^r + h_{i+j}^r}{2} \right)$$

Parameter Symmetrization

$$a_{ij} = \begin{cases} c_{|i-j|} & |j-i| < \frac{s}{2} \\ 0 & \text{o.w} \end{cases}$$

$$\begin{bmatrix} c_1 & c_2 & c_1 & 0 & 0 & 0 & 0 & 0 \\ 0 & c_1 & c_2 & c_1 & 0 & 0 & 0 & 0 \\ 0 & 0 & c_1 & c_2 & c_1 & 0 & 0 & 0 \\ 0 & 0 & 0 & c_1 & c_2 & c_1 & 0 & 0 \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \end{bmatrix}$$



$$h_i^{r+1} = \sigma \left(\sum_{j=0}^s c_j \frac{h_{i-j}^r + h_{i+j}^r}{2} \right)$$

Averaging Neuron

