

SMM - Stabilization matrix method

Do it yourself

$$E_{\text{per target}} = \frac{1}{2} \cdot (O - t)^2 + \frac{\lambda}{N} \sum_l w_l^2 = E_1 + E_2$$

$$O = \sum_i I_i \cdot w_i$$

λ per target

Linear function

$$O = I_1 \cdot w_1 + I_2 \cdot w_2$$

$$\frac{\partial E}{\partial w_i} = \frac{\partial E_1}{\partial w_i} + \frac{\partial E_2}{\partial w_i} = \frac{\partial E_1}{\partial O} \cdot \frac{\partial O}{\partial w_i} + \frac{\partial E_2}{\partial w_i}$$

$$\frac{\partial E_1}{\partial w_i} = ??$$

$$\frac{\partial E_2}{\partial w_i} = ??$$

