

$$\frac{\partial E_{in}(\vec{w}^{(8)})}{\partial \vec{w}^{(8)}} = -y_3 \vec{x}_3 = (-1, -2, 0)^T$$

$$\vec{w}^{(9)} = \vec{w}^{(8)} + y_3 \vec{x}_3 = (0, 3, 1)^T$$

第十轮迭代

$$\max\left(0, 1 - y_4 \left(\vec{w}^{(9)T} \vec{x}_4\right)\right) = \max(0, 1) = 1$$

$$\frac{\partial E_{in}(\vec{w}^{(9)})}{\partial \vec{w}^{(9)}} = -y_4 \vec{x}_4 = (1, 0, 0)^T$$

$$\vec{w}^{(10)} = \vec{w}^{(9)} + y_4 \vec{x}_4 = (-1, 3, 1)^T$$

第十一轮迭代

$$\max\left(0, 1 - y_5 \left(\vec{w}^{(10)T} \vec{x}_5\right)\right) = \max(0, 1) = 1$$

$$\frac{\partial E_{in}(\vec{w}^{(4)})}{\partial \vec{w}^{(4)}} = -y_5 \vec{x}_5 = (1, 1, 0)^T$$

$$\vec{w}^{(11)} = \vec{w}^{(10)} + y_5 \vec{x}_5 = (-2, 2, 1)^T$$

第十二轮迭代

$$\max\left(0, 1 - y_6 \left(\vec{w}^{(11)T} \vec{x}_6\right)\right) = \max(0, 0) = 0$$

$$\frac{\partial E_{in}(\vec{w}^{(11)})}{\partial \vec{w}^{(11)}} = -y_6 \vec{x}_6 = (1, 0, 1)^T$$

$$\vec{w}^{(12)} = \vec{w}^{(11)} + y_6 \vec{x}_6 = (-3, 2, 0)^T$$

第十三轮迭代

$$\max\left(0, 1 - y_1 \left(\vec{w}^{(12)T} \vec{x}_1\right)\right) = \max(0, 2) = 2$$

$$\frac{\partial E_{in}(\vec{w}^{(12)})}{\partial \vec{w}^{(12)}} = -y_1 \vec{x}_1 = (-1, -1, -1)^T$$

$$\vec{w}^{(7)} = \vec{w}^{(6)} + y_1 \vec{x}_1 = (-2, 3, 1)^T$$

第十四轮迭代