PARAMETAR c_i

$$\mu_{Bi} = \frac{1}{1 + e^{d_i(x - c_i)}}$$

$$\frac{\partial E_k}{\partial c_i} = \frac{\partial E_k}{\partial \sigma_k} \cdot \frac{\partial \sigma_k}{\partial \alpha_i} \cdot \frac{\partial \alpha_i}{\partial c_i}$$

isto kao i prije

$$\frac{\partial \alpha_i}{\partial c_i} = \frac{\partial \mu_{Ai} \mu_{Bi}}{\partial c_i} = \frac{\partial \mu_{Bi}}{\partial c_i} \mu_{Ai}$$

$$\frac{\partial \mu_{Bi}}{\partial c_i} = \mu_{Bi}(1 - \mu_{Bi}) \cdot \frac{\partial(-d_i(x - c_i))}{\partial c_i} = \mu_{Bi}(1 - \mu_{Bi}) \cdot d_i$$

$$\boxed{\frac{\partial \alpha_i}{\partial c_i} = \mu_{Bi}(1 - \mu_{Bi}) \cdot d_i \cdot \mu_{Ai}}$$

$$\frac{\partial E_k}{\partial c_i} = -(y_k - \sigma_k) \cdot \frac{\sum_{j=1, j \neq i}^{m} \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1 - \mu_{Bi}) \cdot d_i \cdot \mu_{Ai}$$

STOHASTIČKO:

$$c_i(t+1) = c_i(t) + \eta \cdot (y_k - \sigma_k) \cdot \frac{\sum_{j=1, j \neq i}^{m} \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1 - \mu_{Bi}) \cdot d_i \cdot \mu_{Ai}$$

GRUPNO:

$$c_i(t+1) = c_i(t) + \eta \cdot \sum_{k=1}^{N} (y_k - \sigma_k) \cdot \frac{\sum_{j=1, j \neq i}^{m} \alpha_j (z_i - z_j)}{\left(\sum_{j=1}^{m} \alpha_j\right)^2} \cdot \mu_{Bi}(1 - \mu_{Bi}) \cdot d_i \cdot \mu_{Ai}$$