

Treinamento

$$S = w_1 * x_1 + w_2 * x_2 - \theta$$

$$w_1 = -2,10137$$

$$w_2 = 3,11960$$

$$\theta = 0,191448$$

	AtributoA	AtributoA	Classe	Saída
S_1	-5,4	6,1	O	1
S_2	-5,9	3,7	O	1
S_3	-2,8	2,9	O	1
S_4	3,1	7,7	I	-1
S_5	5,1	6,3	I	-1
S_6	5,2	4,4	I	-1

$$S_1 = -2,10137 * 5,4 + 3,11960 * 6,1 - 0,191448$$

$$S_1 = 30,18551$$

$$S_1 = 1$$

$$S_2 = 23,74918$$

$$S_2 = 1$$

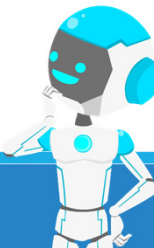
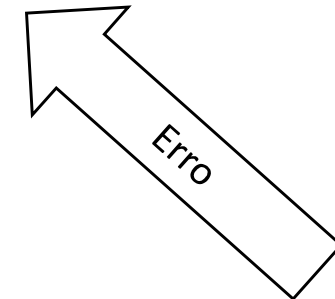
$$S_3 = 14,73924$$

$$S_3 = 1$$

$$S_4 = -2,10137 * 3,1 + 3,11960 * 7,7 - 0,191448$$

$$S_4 = 17,31523$$

$$S_4 = 1$$



Ajustando Pesos

$$\begin{aligned}w_1 &= -2,10137 \\w_2 &= 3,11960 \\ \theta &= 0,191448\end{aligned}$$

Taxa de Aprendizizado

$$\begin{aligned}\gamma &= 0,5 \\ x_0 &= -1 \text{ (constante)}\end{aligned}$$

$$\theta_i = \theta_i + \gamma(d - y)x_0/2$$

$$w_i = w_i + \gamma(d - y)x_i/2$$

$$w_1 = -2,10137 + 0,5 * (-1 - 1) * 3,1 / 2$$

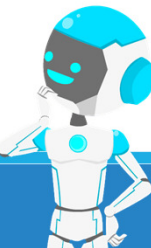
$$w_1 = -3,65137$$

$$w_2 = 3,11960 + 0,5 * (-1 - 1) * 7,7 / 2$$

$$w_2 = -0,7304$$

$$\theta_i = 0,191448 + 0,5 * (-1 - 1) * -1 / 2$$

$$\theta_i = 0,69144$$



Treinamento

$$S = w_1 * x_1 + w_2 * x_2 - \theta$$

	P	C	Classe	Saída
S_1	-5,4	6,1	O	1
S_2	-5,9	3,7	O	1
S_3	-2,8	2,9	O	1
S_4	3,1	7,7	I	-1
S_5	5,1	6,3	I	-1
S_6	5,2	4,4	I	-1

Pesos Atualizados

$$w_1 = -3,65137$$

$$w_2 = -0,7304$$

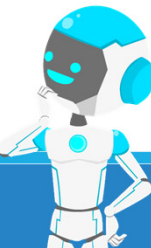
$$\theta_i = 0,69144$$

$$S_5 = -23,91494$$

$$S_5 = -1$$

$$S_6 = -22,8923$$

$$S_6 = -1$$



Treinamento

$$S = w_1 * x_1 + w_2 * x_2 - \theta$$

	P	C	Classe	Saída
S_1	-5,4	6,1	O	1
S_2	-5,9	3,7	O	1
S_3	-2,8	2,9	O	1
S_4	3,1	7,7	I	-1
S_5	5,1	6,3	I	-1
S_6	5,2	4,4	I	-1

$$w_1 = -3,65137$$

$$w_2 = -0,7304$$

$$\theta_i = 0,69144$$

$$S_1 = 14,57054$$

$$S_1 = 1$$

$$S_2 = 18,14918$$

$$S_2 = 1$$

$$S_3 = 7,41424$$

$$S_3 = 1$$

$$S_5 = -17,63475$$

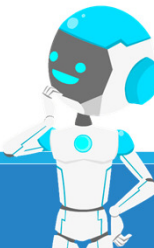
$$S_4 = -1$$

$$S_5 = -23,91494$$

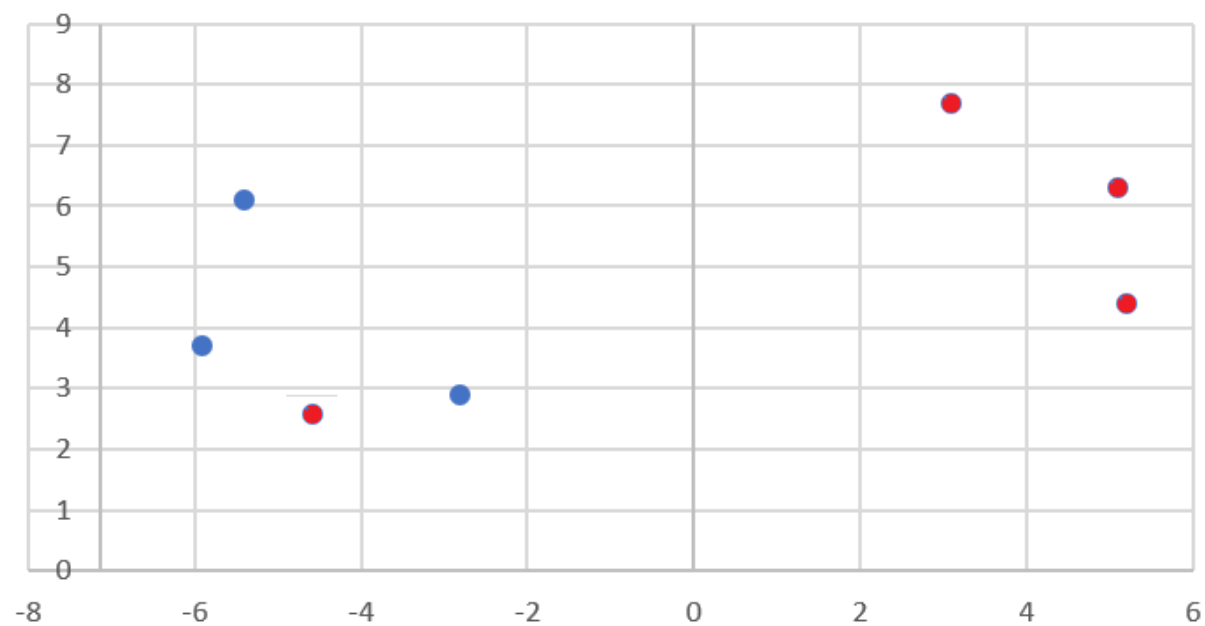
$$S_5 = -1$$

$$S_6 = -22,8923$$

$$S_6 = -1$$



Não Convergência



Fatores de Ajuste

$$w_1 = -3,65137$$

Inclinação

$$w_2 = -0,7304$$

interceptação

$$S = w_1 * x_1 + w_2 * x_2 - \theta$$

