

weight updation formula:

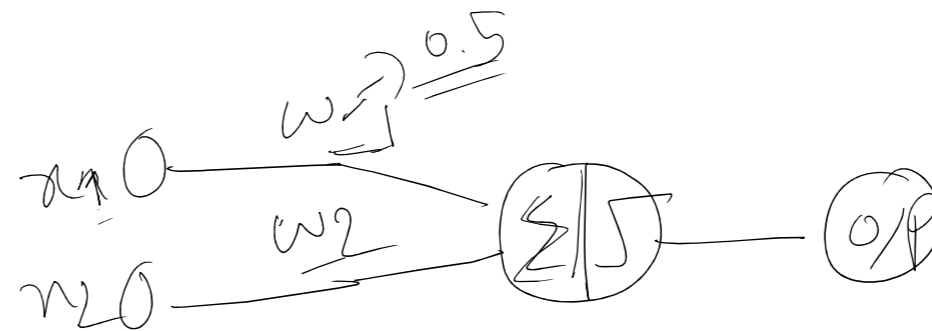
$$w_{new} = w_{old} + \eta (y - \hat{y}) \times x_i$$

error

gradient descent

Special case

$$w_{new} = w_{old} - \eta \frac{\partial L}{\partial w}$$



η - Learning rate
 0-1
 y = Actual / Target
 \hat{y} = Prediction
 x_i = input

Case 1: $y = 1$ $\hat{y} = 0$ error = 1

$$w_{new} = w_{old} + \eta (y - \hat{y}) \times x_i$$

error

error

Ctrl: 02

$$w_{new} = w_{old} + \eta \underbrace{(y - \hat{y})}_{\text{error}} \times x_i$$

$\omega_{new} = \omega_{old} - \eta \times r_i$

Come! 03²

$$w_{new} = \underbrace{w_{old}}_0 + \eta \underbrace{(y - \hat{y})}_{\text{error}} \times \underline{x_i}$$

$$w_{new} = w_{old}$$