

Logistic Regression (O)

1. Initialize weights randomly
2. Repeat until convergence :

$$z = X^* \beta$$

$$p = 1 / (1 + e^{z - z_0})$$

calculate error ($\hat{y} - p$)

update beta using gradient descent

3. for new sample :

if $p >= 0.5 \rightarrow \text{class 1}$
else ~~class 0~~ $\rightarrow \text{class 0}$

4. return predicted class

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