

Logistic Regression (0)

1. Initialize weights randomly
2. Repeat until convergence:

$$z = X^T \text{beta}$$

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

calculate error ($y - p$)

3. for new sample:
update beta using gradient descent

if $p > 0.5 \rightarrow \text{class 1}$

else ~~class~~ $\rightarrow \text{class 0}$

4. return predicted class