

# MULTINOMIAL LOGISTIC REGRESSION

- An extension to logistic regression to handle multiple classes.
- The logistic function is replaced with a softmax function

$$P(y_i = k | X) = \frac{e^{\beta_k x_i}}{\sum_{j=1}^K e^{\beta_j x_i}}$$

target class  $K$  Feature matrix

euler's number Linear model

ChrisAlbon