

The Logistic Regression Model

Michiel de Hoon (mdehoon@cal.berkeley.edu)

In a logistic regression model, we use a weighted sum of these two predictors to calculate a joint score S :

$$S$$

3 Using the logistic regression model for classification

Classification is performed by calling the `classify`

True: 0 Predicted: 0
True: 0 Predicted: 0
True: 0 Predicted: 0

showing that the prediction is correct for all but one of the gene pairs. A more reliable estimate of the prediction accuracy can be found from a leave-one-out analysis, in which the model is recalculated from the training data after removing the gene to be predicted: