

Machine Learning 6.867 - Pset 2

October 8, 2015

1 Logistic Regression

1.1 Implementation

We implemented L_2 -regularized logistic regression using gradient descent.

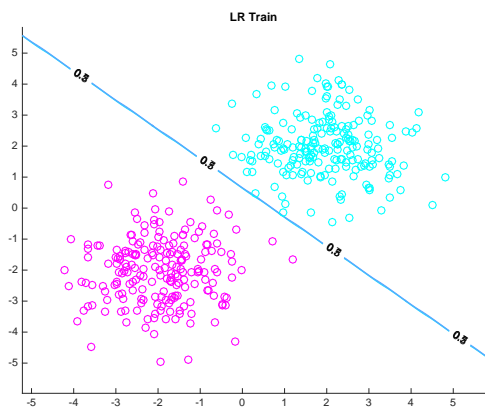
1.2 Testing in data with $\lambda = 0$

We test the logistic regression

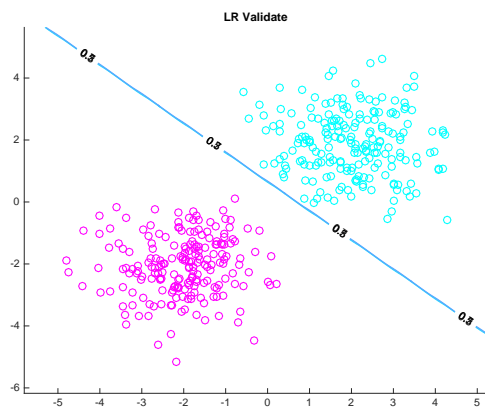
2 Support Vector Machine

2.1 Implementation

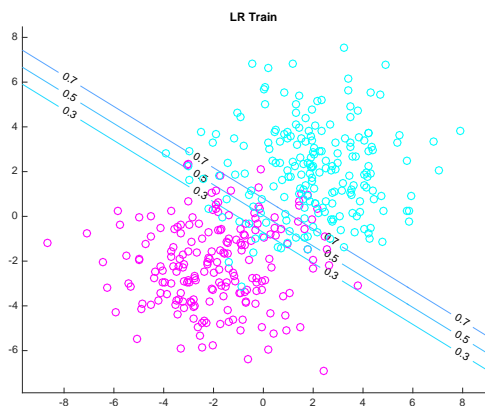
3 Titanic Data



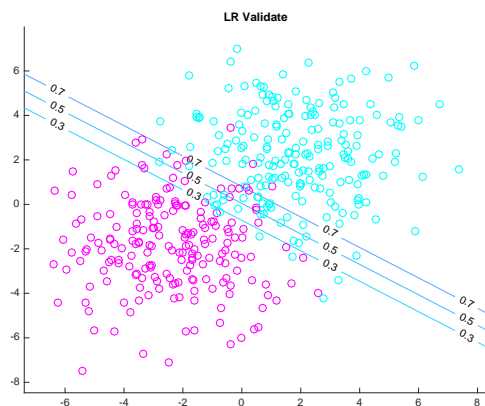
(a) Data with $\sigma = 1$, training



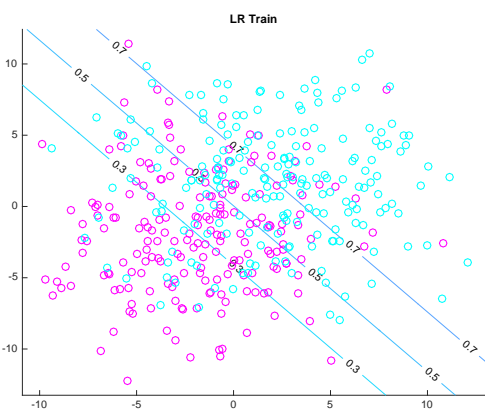
(b) Data with $\sigma = 1$, validation



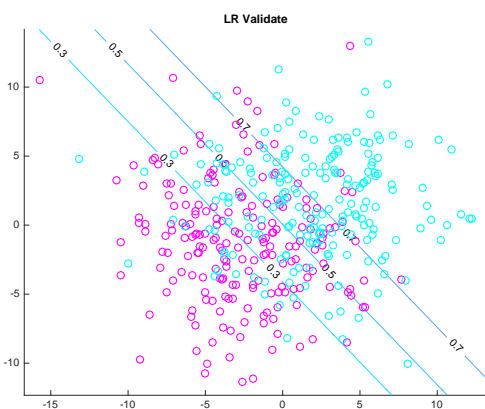
(c) CData with $\sigma = 2$, training



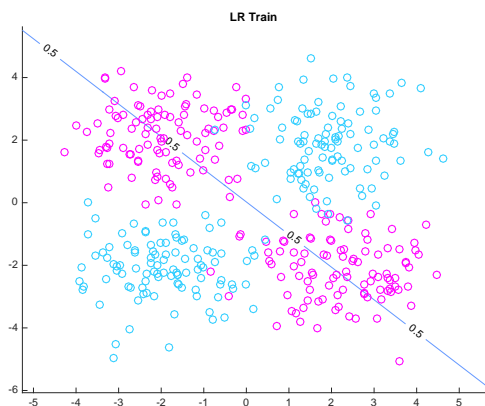
(d) CData with $\sigma = 2$, validation



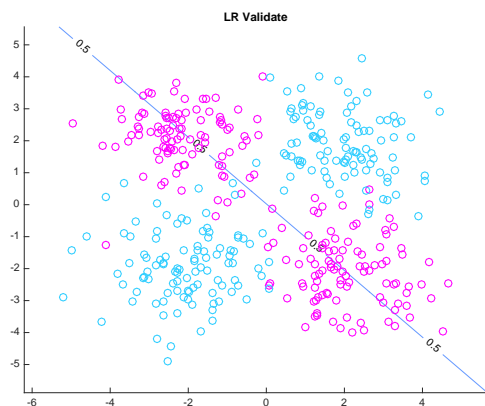
(e) Data with $\sigma = 4$, training



(f) Data with $\sigma = 4$, validation



(g) Non-seperable data, training



(h) Non-seperable data, validation