HW2: Regression

David Hall
`dlwh@cs.berkeley.edu`

February 23, 2012

1 Introduction

This report investigates

2 Model

The model we use is a simple regularized regression model using either ℓ_2 or ℓ_1 loss and ℓ_2 or ℓ_1 regularization. That is, we seek to minimize, for $\{p, q\} in \{1, 2\}$ and tuning parameter λ:

$$\min_{\theta} \sum_i |y^{(i)} - \theta^T x^{(i)}|^p + \lambda ||\theta||_q^q$$

3 Experimental Setup

We used the