## Statistics 745

## Group Assignment 19

- 1. Implement least squares boosting and apply it to the data. Choose M = 500.
- 2. Define  $\nu \in (0, 1]$  as the learning rate and modify the update step as  $f(x) = f(x) + \nu \beta h_j(x)$ . Note  $\nu = 1$  is the boosting algorithm. Implement this with  $\nu = 0.05, 0.1, 0.5, 0.75$ . What values of  $\nu$ perform well? Also is the a relationship to M?