

Data Mining for Quality

Richard D. De Veaux
Department of Mathematics and Statistics
Bronfman Science Center
Williams College
Williamstown, MA 01267
deveaux@williams.edu

Abstract

Data mining is not often associated with quality control methods. However in this talk we'll show how bagging and boosting, methods that combine many smaller models can be used to help improve quality. We'll describe some of the recent developments including a robust boosting method and we'll illustrate their use via some case studies. In particular we'll see how a robust boosting algorithm fares in predicting the quality of wine when different amounts of noise are added to the data.