



OREGON CHAPTER

American Statistical Association

Winter 2009 Meeting

February 25, 2009

Fong Huong Palace, Beaverton, OR

Agenda:

1. Minutes and financial report (Meike Niederhausen)
2. Science fair (Teri Utlaut)
3. ASA-ORCH Teacher memberships (Dongseok Choi)
4. From the floor

Consistent variable selection in additive models

Dr. Lan Xue, Oregon State University Department of Statistics

Abstract

A penalized polynomial spline method will be introduced for simultaneous model estimation and variable selection in additive models.

The proposed method approximates the nonparametric functions by polynomial splines, and minimizes the sum of squared errors subject to an additive penalty on norms of spline functions. This approach sets estimators of certain function components to exactly zero, thus performing variable selection. Under mild regularity conditions, I show that the proposed method estimates the non-zero function components in the model with the same optimal mean square convergence rate as the standard polynomial spline estimators, and correctly set the zero function components to zero with probability approaching one, as sample size goes to infinity. The theoretical results are well supported by simulation studies. The proposed method is also applied to two real data examples for illustration.

Treasurer's Report

Winter 2009

Account xxxx643-6	
Previous Balance	\$4438.45
Chapter rebates and Dues from ASA and 2008 Fall meeting	+\$213.90
Balance	\$4652.35

Minutes of the Fall 2008 Meeting Thursday, November 6, 2008

1. Location: King Tin Restaurant, Corvallis, OR
2. Participants: 28
3. Business items:
 - a. Treasurer's report and minutes by Meike Niederhausen. The starting balance after the Spring 2008 meeting was \$2251.45 and the ending balance was \$4428.45. The majority of the money collected was from the Bayesian Short Course (\$1991.00).
 - b. Dongseok Choi asked about the new chapter dues of \$8 not yet being listed on the ASA member dues list. This needs to be investigated.
 - c. Lisa Madsen discussed the Intel Northwest Science Expo in place of Teri Utlaut.
 - i. It will be held on Friday, April 3, 2009 at Portland State University. Judges are needed for both the middle and high school categories for awarding prizes in the outstanding use of statistics. The time commitment is from 8 am to 2 pm.
 - ii. At the Spring 2008 meeting, the chapter budget for the Northwest Science Fair was increased from \$400 to \$450.
 - iii. Thomas Owen encouraged people to sign up (especially students) and sent around a sign-up sheet.
 - d. Dongseok Choi brought up the issue of ASA Oregon Chapter membership. In particular he brought up the idea of creating a different membership for teachers that would possibly even be free of charge. Since we do outreach with them it would be a way to encourage them to be active in the chapter. It was decided to revisit this discussion at the Winter 2009 meeting.
4. Presentation by Dr. Susan Alber from Oregon State University on *A method for choosing the prior distribution in one of the simplest Bayesian models: a normal distribution with a conjugate prior.*

Submitted by Meike Niederhausen, Secretary/Treasurer 2008-9.