

Seminars on Statistics in Marketing and Psychology, Autumn 2007

Research seminars in Marketing, Psychology and Statistics on THURSDAYS 1:45-3:25 in Cockins Hall 240.

These seminars will consist mainly of ongoing research presentations and discussions of published papers. You are welcome to join us.

LIST OF SEMINARS

September 27th. Organizational meeting

October 4th Trish Van Zandt, Psychology Department

Will lead a discussion of a paper by Sisson, Fan and Tanaka which was emailed to participants.

A related paper is

Sisson, S.A. (2007).

“Genetics and Stochastic Simulation Do Mix!”

The American Statistician, May 2007, 112-119.

An earlier version of this appears at

http://web.maths.unsw.edu.au/~scott/papers/paper_genetics_mix.pdf

October 11th Greg Allenby, Marketing Department

A Disaggregate Model of Advertising and Brand Consideration

October 18th Chris Hans, Statistics Department

“Aspects of Bayesian Lasso Regression”

It is well known that Lasso estimates for linear regression correspond to Bayesian posterior modes under a particular prior distribution, however the strength of this connection has yet to be greatly exploited. A fully Bayesian approach to the Lasso regression problem is described here that simultaneously addresses parameter estimation, prediction of future observations and the question of variable selection/model uncertainty. Emphasis is placed throughout on the use of the posterior mean – the Bayes estimator under squared-error loss – rather than the “classical” Lasso approach of estimation via posterior modes. Prediction of future observations is accomplished via posterior predictive distributions. A new Gibbs sampler for posterior inference is introduced. Drawbacks of using the “classical” Lasso for variable selection are discussed and the problem is recast in the context of Bayesian model selection. An R library with C++ source code is provided that implements all of the methodology discussed.

October 25th No seminar

November 1st Mike Edwards, Department of Psychology

November 8th No seminar

November 15th No seminar

November 22nd – No seminar

November 29th Catherine Montalto, Department of Consumer Science