

Statistics 600: Statistical Computing

Course Packet

Fall 2003

Optimization

- 1 Thisted, R.A. (1988) *Elements of Statistical Computing*, Chapter 4. Chapman & Hall, New York. pp. 155-258.
- 2 Navidi, W. (1997) "A Graphical Illustration of the EM Algorithm", *The American Statistician* 51, 29-31.

Background on Bayesian Inference

- 3 Box, G.E.P. and Tiao, G.C. (1973) *Bayesian Inference in Statistical Analysis*, Chapter 1. Addison-Wesley Pub. Co., Reading, Mass. pp. 1-75.

Sampling and Markov Chain Monte Carlo

- 4 Smith, A.F.M. and Gelfand, A.E. (1992) "Bayesian Statistics Without Tears: A Sampling-Resampling Perspective", *The American Statistician* 46, 84-88.
- 5 Rubin, D.B. (1992) "Using the SIR Algorithm to Simulate Posterior Distributions" in Bernardo et al. (Eds.) *Bayesian Statistics 3*. Oxford University Press, pp. 395-402.
- 6 Chib, S. and Greenberg, E. (1995) "Understanding the Metropolis-Hastings Algorithm", *The American Statistician* 49, 327-335.
- 7 Casella, G. and George, E.I. (1992) "Explaining the Gibbs Sampler", *The American Statistician* 46, 167-174.

Nonparametric Density Estimation

- 8 Izenman, A.J. (1991) "Recent Developments in Nonparametric Density Estimation," *Journal of the American Statistical Association*, 86: 205-224.

Bootstrap Methods

- 9 Efron, B. and Gong, G. (1983) "A Leisurely Look at the Bootstrap, the Jackknife, and Cross-validation," *The American Statistician*, 37: 36-48.

Smoothing

- 10 Thisted, R.A. (1988) *Elements of Statistical Computing*, Chapter 6. Chapman & Hall, New York. pp. 337-361.

Presentations

- 11 Freeman, D. H., M.E. Gonzalez, D.C. Hoaglin, and B.A. Kilss (1983) "Presenting Statistical Papers," *The American Statistician*, 37 (2), 106-110.
- 12 Becker, R.A. and S Keller-McNulty (1996) "Presentation Myths," *The American Statistician* , 60 (2), 112-115.