Computer-intensive Statistics and Data Mining
1MS009

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Uppsala University, Period 3, 2010

1 Time table (preliminary)

Lectures 1, 2, 3: Introduction to R, Random number generation (Chapter 2 of the script)
Lectures 3, 4, 5: Monte Carlo Methods, MCMC (Chapter 3)
Lectures 6, 7, 8: Bootstrap (Chapters 4)
Lectures 9, 10, 11: Nonparametric density, Nearest neighbor method, Kernel methods (Chapter 9)
Lectures 12, 13, 14: Ridge regression, Spline (Chapter 10)
Lectures 15, 16, 18: Wavelets, Model assessment (Chapter 10)
Lectures 19, 20: EM Algorithm, Simulation Methods
10/12, 8.15 and 13/12 10.15 Student presentations OBLIGATORY!
Lecture 23, repetition
16/12 TENTAMEN

2 Obligatory Assignments

3. Homework: Bootstrap, distributed 4/11 deadline: 19/11
4. Homework: Density estimation, distributed 15/11 deadline: 30/11
5. Homework: Nonparametric regression, distributed 30/11, deadline: presentation