

Biostatistics 615/815

Problem Set 10

Due Monday, December 6, 2004

1. For this exercise, you will need the data set “ModelFittingData.txt” available at www.sph.umich.edu/csg/abecasis/class/ (Right click on the data link and select *Save as...* to download). The data set lists the heights (in centimeters) for 2000 individuals.
 - a) Select two of the multi-dimensional minimizers we considered in class (i.e. choose between the Nelder-Mead, E-M, Gibbs sampling and Simulated Annealing methods) and fit a mixture of one, two and three normal distributions to the data.
 - b) Compare the relative performance of the two minimizers you selected. Consider the difficulty of implementing the approach, whether the two minimizers found similar (or different solutions), and the computational burden for each method.