MA 681
Assignment 6
2 April 2015

Due April 7

This assignment is a continuation of yesterday morning's class.

The assignment material is in https://github.com/havilandw/MA681-Assignment-6.
If you have git installed, open a terminal and type:

git clone https://github.com/havilandw/MA681-Assignment-6

The starting point is the markdown file I used in class: <Bayes: MC integ to MCMC.Rdm>

In the assignment folder you will find:

- The markdown file <Bayes: MC integ to MCMC.Rdm>
- The R script: <metrop.cauchy.r>
- Cheatsheets and Reference cards for R Markdown and git.
  You can find more information at http://rmarkdown.rstudio.com/ .

The deliverable for this assignment is a working Rdm file that generates a pdf.

For submission, please rename the Rdm file "MH - <your name>.Rdm". Submit the file on blackboard.

The document you create should contain an explanation of the Metropolix-Hastings algorithm that combines text, graphics, and equations.

As I showed in class, you may find it helpful to use an equation editor that produces LaTeX output. I like the editor at http://www.codecogs.com/latex/eqneditor.php .

This assignment will be evaluated as follows:

- The submitted Rdm generates a pdf and is submitted before the beginning of class on April 7.
- The description of the MH algorithm is clear and well thought out.
- The explanation identifies the practical issues that make the algorithm useful and how the algorithm works.
- The document provides a logical progression. A reader with knowledge of R could reproduce the the analysis presented in the document.
- Images are appropriately placed, clearly labeled, and explained.