AIML 168
Homework 2

Feel free to work with other students, but make sure you write up the homework and code on your own (no copying homework *or* code; no pair programming). Feel free to ask students or instructors for help debugging code or whatever else, though.

1 Go through Chapters 2 and 3 of the textbook. Run the code in each of the chapters and reproduce the figures below.

I submitted a PDF of my reproduced code and figures as a seperate file on the Github. ■

2 Find a paper that incorporates or discusses MCMC methods and also has code that can be run. Write a 1 page summary of the paper. Make sure the code you find can be run without too much difficulty since in your next homework assignment you will be expected to run the code.

I found the paper that describes the PYMC package. Since I hope to use the package a lot in my final project, I will read about its implementation and learn more about it. The paper also contains a good amount of tutorials that I can follow. Here is the link to the paper: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3097064/ .

I also found a few other papers that interest me, one is about modeling climate change and the other is about black holes. While both papers have data to download, the datasets are massive (understandably) and so I don't think my laptop can handle those papers. ■