

DATA130004: Homework 7

Due in class on December 13, 2021.
Please organize HW07 and HW06 together to hand in.

1. Exercises 9.1, 9.3 and 9.4.
2. Gibbs sampling can be viewed as a special case of the Metropolis-Hastings algorithm. In Gibbs sampler, every newly proposed sample is accepted with probability one. Explain the above connection by considering updating just one block at a given iteration, and then checking if the acceptance probability is one.

Hint: you may find the book *Bayesian Data Analysis, 3rd edition* by Gelman et al. useful.