STA 542 – Homework 8

Due: Wednesday, November 11, at the start of class

Credit. This homework is graded for a substantive, good-faith attempt. Address every assigned part and show the reasoning behind each answer. Correct answers without supporting work do not constitute a substantive attempt.

Submission. Submit one ordered PDF. Mathematical and statistical reasoning must be written legibly by hand; tablet handwriting is welcome. R code, numerical output, tables, and plots may be printed or inserted and appended. Simple code or plots may instead be sketched when exact output is unnecessary.

Problems

Problem 1. Complete Exercise 12.2(a)–(b),
Matrix Order and Innovation Recovery, from Workbook 12.

Problem 2. Complete Exercise 13.2(a)–(b),
Read the innovation coefficients, from Workbook 13.

Problem 3. Complete Exercise 14.2(a)–(d),
How much improvement pays for a lag?, from Workbook 14.

Self-assessment. Choose one step in Problems 1–3 that you are least confident about. Identify the problem and part. In a short paragraph, explain what you can justify, where your reasoning becomes uncertain, and one specific question you would like to discuss with a TA.