CS7DS3: Applied Statistical Modelling

Logistics & Structure Outline

Arthur White
CS7DS3 Overview

• Instructor: Arthur White

• Email: arwhite@tcd.ie

• Office: Room 144, Lloyd Building
  • Email me to schedule a meeting
  • I can meet you remotely using Zoom, Teams, etc. (This is still my preference for now.)

• Class page:
  scss.tcd.ie/~arwhite/Teaching/CS7DS3.html

• All material will appear on blackboard too
Pre-requisites

- Formally, none.
- Probability concepts: (distribution of random variables, expectations, variances, Bayes's theorem...) We will review this.
- Be familiar with R (Python may also be useful, but is not my preference.)
- Some material will overlap CS7DS1 and CS7DS4, although the spirit and emphasis will be different.
Basic Schedule

- Lectures
  - Monday 1pm and Wednesday 4pm
  - In class and streaming using Collaborate Ultra on blackboard
  - Supporting material (pdfs, case studies, etc.) will be made available at same time.
Communication

- Discussion board
  - Ask any/all questions here
  - Create new threads or join existing ones
  - Anonymous questions are fine
  - Please be respectful to me and each other in all interactions

- Your interaction and feedback are crucial
  - In general, I encourage you to keep in touch with another – especially class rep

- arwhite@tcd.ie
Online resources

• Case studies available starting Week 2.
• These will the methods discussed in a practical setting, much like a lab and are directly relevant to assignments.
• These will use R.
• You should download R, and Rstudio
  • http://www.r-project.org/
  • https://www.rstudio.com/home/
• Both are open source and free to download
• You will also need Word, or similar (LaTeX and Markdown are also good options) for your main assignment.
• Python is an option, but will not be supported by me
Assessment

This module is assessed **100%** by coursework, i.e., **no exam**.

Two small assignments worth 15% each. These will be problem sets.

Main assignment will be worth 70%. This will be a 10 page report describing a detailed analysis of a complex data set.

All assignments will be submitted through Turnitin.
Assessment Schedule – Provisional

• Short Assessment 1 – assigned Week 4
• Main assignment – assigned end Week 6/beginning Week 7
  • I would suggest you work on this in stages and talk to me about your thoughts/ideas.
• Short Assessment 2 – assigned Week 11.
• You will have a lot of time to do the main assignment – max allowable. Deadlines for short assignments may be shorter.
• Communication is important here – I encourage the class and especially class rep to stay in touch with me
• We can talk in more detail about the assignments when they are released.
There is no compulsory textbook for this course, but the following cover different aspects of the material:

Questions?
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