Welcome

ST552 Lecture 1

Charlotte Wickham 2019-01-07

- I'm from New Zealand, but I've also lived in Ireland and California
- I have a husband and two cats
- I really enjoy playing indoor soccer at the Corvallis Sports Park.
- I like making, building and fixing things.

stat552.cwick.co.nz

- General Overview
- Syllabus
- Getting to know you and what you already know

a.k.a Regression models (of the linear kind)

One type of model that describes the relationship between a continuous response variable and one or more explanatory variables.

Three pronged attack:

- Theory of linear regression models (first half)
- Linear models in practice (second half)
- R for linear models, data exploration and simulation (everywhere)

- Linear Models with R, Second Edition by J. Faraway (Chapman & Hall/CRC Texts in Statistical Science)
- This is available to read online through the OSU library.
- I will post specific sections to read as part of homework, but you should also be following along independently.

Syllabus

My style

I tend to use slides. I will post them at stat552.cwick.co.nz by noon the day of lecture.

I'll leave blanks for derivations, question answers, or sketches. I.e. you might want to print them and bring them along.

After lecture, I will post scans of anything I do on the document camera.

Sometimes we might do actual analyses in class, and a laptop will be handy, I'll let you know when to bring it.

I expect you to ask questions! There are no *stupid* questions, but if I don't think we have time to answer it properly in class, don't be offended if I ask you to ask it on the discussion board or in office hours.

- Sign up for a free account on rstudio.cloud
- Start reading Chapter 1 in Linear Models with R

What do you already know?

Get into groups of 4-5. Introduce yourselves.

Appoint a recorder, who will find some paper, and start by writing all your names on it.

Brainstorm everything you know about **simple** linear regression and record in on paper.

Simple, means only one explanatory variable.

I want that piece of paper.

See you Wednesday: Review of simple linear regression