# DSA8022 Frontiers in Analytics

Part one: Visual Analytics

### Who we are?

- Introduce yourself
  - Your name
  - Your area of focus
  - Your background and any technical background
  - What is one of your interest/problem/issue in this context
- Introduce the teaching team
  - Salman Ahmad
  - Muhammad Irfan
  - Hui Wang

## Visual Analytics: topics

- Visual Analytics as a science and theory of visualisation
- Use of visualisation packages in R
- Creation of interactive visual environments, including dashboards

### Visual Analytics: schedule

#### • Lectures:

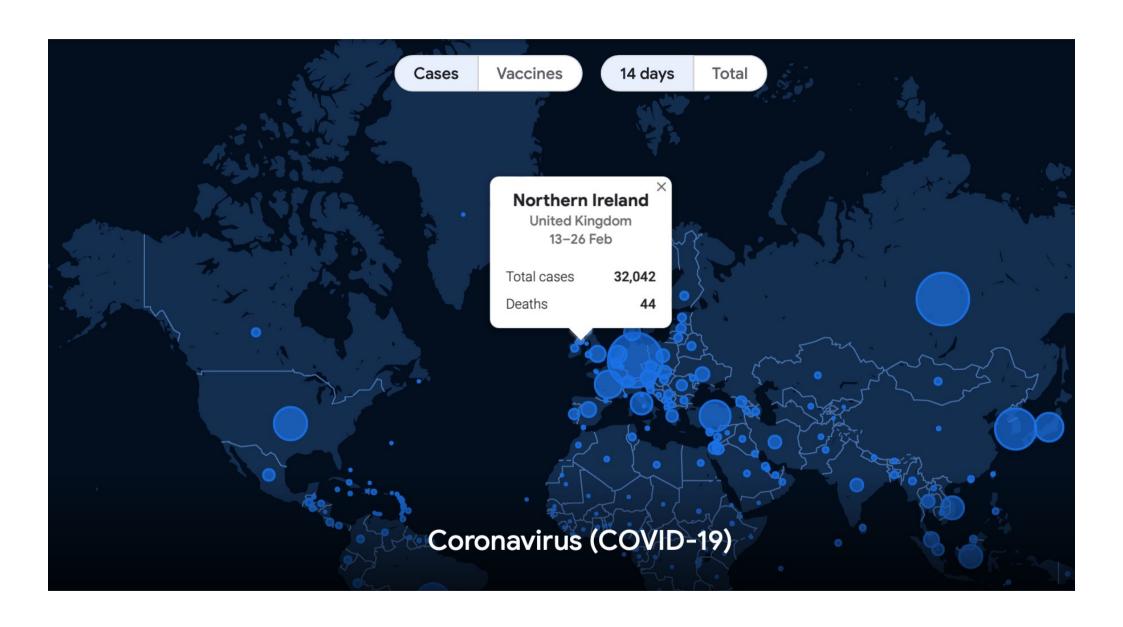
- Monday morning: Visual Analytics Design Principles
- Monday afternoon: Visualisation using ggplot2, a package in R
- Tuesday morning: Creating Interactive Dashboards with Shiny

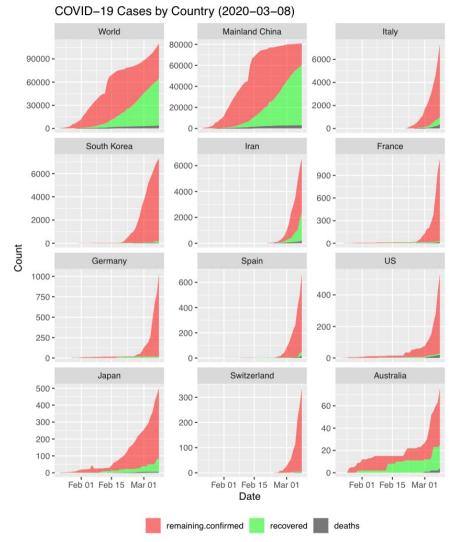
#### • Practicals:

- Tuesday afternoon: live demo
- Wednesday morning: do it yourself

### 2012 Population in US by states







From the above figure, the coronavirus seems to be under control in China, with an increase of recovered cases (see the green area) every day and a shrinking of the remaining confrimed cases (based on official stats). However, in the rest of the world (i.e., outside of China), the confirmed cases are surging up in many other countries, which suggests that the virus has broke out there.