## Communicating with Data via R Markdown

## Instructions

- 1. Install the latest  $R^1$  (>3.5) and RStudio Desktop<sup>2</sup> (>1.2).
- 2. Install LaTeX<sup>3</sup>. This is rather big (e.g. MacTeX is approximate 3.9G). If you have never installed LaTeX before, then you are recommended to install via tinytex which is much more light-weight. Open R and enter the following commands:

```
install.packages("tinytex")
tinytex::install_tinytex()
```

3. Install the following packages and its dependencies:

```
install.packages("tidyverse",
                  "rmarkdown",
                  "knitr",
                  "emo",
                  "xaringan",
                  "usethis",
                  "rmdformats",
                  "prettydoc",
                 "rticles",
                  "linl",
                  "shiny",
                  "bookdown",
                  "pagedown",
                  "remotes")
# the following is not on CRAN
remotes::install_github("gadenbuie/xaringanthemer")
```

- 4. Make an account at https://rstudio.cloud (it's free).
- 5. Make an account at https://rpubs.com (it's also free).
- 6. Make a github account https://github.com (yes free).
- 7. Install Google Chrome browser<sup>4</sup> on your laptop.

## Pre-Work

You will get the most out of the workshop if you know some markdown, LaTeX, HTML/CSS and R. Please do these tutorials if you are not familiar or need to brush up with it!

<sup>&</sup>lt;sup>1</sup>https://cran.r-project.org/mirrors.html

<sup>&</sup>lt;sup>2</sup>https://rstudio.com/products/rstudio/

<sup>&</sup>lt;sup>3</sup>https://www.latex-project.org/get/

<sup>&</sup>lt;sup>4</sup>https://www.google.com/chrome/

- Markdown tutorial https://www.markdowntutorial.com 10 minutes tutorial
- LaTeX tutorial https://www.latex-tutorial.com/quick-start/
- HTML/CSS tutorial https://www.codecademy.com/learn/learn-html/modules/learn-html-elements (This is free but you need to sign up)
- Brush up in basic R (http://swirlstats.com) if you need to

## On the day

- Bring your laptop (with administrative rights) along with your power cord.
- Registration starts at Friday 4th October 12.30pm at Carslaw Room 353, The University of Sydney.

Emi Tanaka

cc: Mengbo Li (Organiser)