

## Communicating with Data via R Markdown

### Instructions

1. Install the latest R<sup>1</sup> (>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(c("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>1</sup><https://cran.r-project.org/mirrors.html>

<sup>2</sup><https://rstudio.com/products/rstudio/>

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

<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.
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cc: Mengbo Li (Organiser)