Machine Setup

Welcome! Prior to attending the seminar talk, please ensure you have done the following.

1. Install R and RStudio

- a. Download both software at https://posit.co/download/rstudio-desktop/.
- b. Once the download completes, double-click on the .exe file to run the installer. Simply follow the steps of the installer to finish.

1: Install R

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

R is not a Posit product. By clicking on the link below to download and install *R*, you are leaving the Posit website. Posit disclaims any obligations and all liability with respect to *R* and the *R* website.

2: Install RStudio

DOWNLOAD RSTUDIO DESKTOP FOR WINDOWS

Size: 281.27 MB | <u>SHA-256: 9E6F68CA</u> | Version: 2025.05.0+496 | Released: 2025-05-05

DOWNLOAD AND INSTALL R

Note: These are two different softwares, so please ensure you have installed both of them. For more detailed guideline, visit link.

2. Download Workshop material

- a. Visit https://github.com/haziqj/aiti-talk on your search engine.
- b. Press on the green code icon on top right.

c. Option 1: Open with Github Desktop and clone the repo onto a convenient location on your computer. Option 2: Download the zip file and unzip onto a convenient location on your computer.

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d. Click on aiti-talk.Rproj to open the project in RStudio.

3. Install all packages

a. Launch Rstudio app directly. It will look something like:



Figure 1: Source: Link

Note: Previously, we installed both R (language) and Rstudio (IDE). However, all coding can be done in just Rstudio.

b. Install the following R packages by running the following code in the console pane:

```
install.packages(c(
    "tidyverse",
    "tinyplot",
    "sf",
    "bruneimap",
    "tidytext",
    "tm",
    "wordcloud",
    "gtsummary",
    "devtools",
```

```
"scales",
"mvtnorm",
"titanic",
"ggthemes",
"viridis",
"ggrepel",
"RColorBrewer"
))
```

```
devtools::install_github("haleyjeppson/ggmosaic")
```

4. Ready to start!

Quick Tips

- To work on long chunks of codes, it is recommended to use the **source** pane by creating a R Script.
- To create a R Script: File > New File > R Script
- To run code: press Ctrl + Enter (Windows) or Cmd + Enter (Mac). Alternatively, press run icon (top right) of the source pane.
- To load libraries for additional functions, run the codes in **source** pane:

```
library(tidyverse)
library(ggplot2)
```

Try it out!

print("Hello, World!")

[1] "Hello, World!"

plot(pressure)



From simple printing to complex visualisation, possibilities are now limitless, Happy coding!