Data Visualization Workshop

Pre-Workshop Setup Instructions

Please complete the following steps **before arriving** at the workshop.

If anything in this setup doesn't work, don't panic. Installation issues are common and fixable, and we'll make sure everyone is up and running at the workshop.

Step 1 — Create Your Working Folder

1. On your computer, create a new folder.
   - Suggested name: **DataViz_Workshop**
2. This folder will be your **working directory**.
   All workshop files must go here.
3. Save the file: `penguins.csv` into this folder.
4. Save **all future materials** (scripts, slides, data files) into this same folder.

This keeps everything organized and prevents file path errors.

Step 2 — Install or Update R and RStudio

You must have <u>both **R** and **RStudio**</u> installed, preferably updated to the latest version.

Install or Update R
Download from:
→ https://cran.r-project.org/
- Click your operating system (Mac / Windows)
- Install the latest version
- If you already have R installed, reinstalling updates it

Install or Update RStudio
Download from:
→ https://posit.co/download/rstudio-desktop/
- Install the free Desktop version
- Open RStudio after installation
- Go to **Help → Check for Updates**

Step 3 — Install Required Packages

You will need the following packages (see below for instructions):
- `ggplot2`
- `here`
- `readr`
- `dplyr`
- `tidyr`
- `stringr`
- `lubridate`
- `forcats`
- `janitor`
- `scales`
- `patchwork`

DataViz Pre-Workshop Instructions
u. 2026-02-12

Option A: run the Setup Script attached to this email:
Open the file: `install_packages.R` in RStudio
To use it:

1. Save `install_packages.R` into your workshop folder.
2. Open RStudio.
3. Click **File → Open File…**
4. Open `install_packages.R`
5. Highlight all the code in the file; Click **Run** (upper-right corner of your *Source* panel, where this code file displays)

That's it.
If a package is already installed, it will simply update it.

Option B: if you prefer to install manually
You can also copy and paste this into the Console in RStudio:
```
install.packages(c("ggplot2", "here", "readr", "dplyr", "tidyr",
"stringr", "lubridate", "forcats", "janitor", "scales", "patchwork"))
```

Step 4 — Last:
Open RStudio and:

1. Click **File → New Project**
2. Choose **Existing Directory**
3. Select your workshop folder

This ensures R automatically uses the correct working directory.

Troubleshooting (if you hit an error)
If something does not work during setup, try the steps below.

1. "Package '___' is not available for this version of R"
This usually means your version of R is outdated.
Fix:

1. Go to: https://cran.r-project.org/
2. Download and install the latest version of R.
3. Restart your computer.
4. Re-run `install_packages.R`.

2. Installation takes a long time
That is normal.

- The first time installing packages can take 5–15 minutes.
- You may see a lot of text scrolling in the console.
- That is expected.

Wait until you see:
```
Package installation complete.
```

3. "There is no package called '___'" when loading a library
That means installation didn't complete.
Try running:

```
install.packages("ggplot2", dependencies = TRUE)
```
If that works, rerun the full install script.

4. "cannot open file 'penguins.csv'"

This is almost always a working directory issue.

Recommended Fix (Best Practice): Instead of using `setwd()`, create a Project:

1. Open RStudio.
2. Click **File → New Project**
3. Choose **Existing Directory**
4. Select your workshop folder.

Now RStudio will automatically use the correct folder.

5. Mac users: "Xcode command line tools not installed"

If prompted, run this in your Mac Terminal:
```
xcode-select --install
```
Then re-run the package installation.

6. Completely stuck?

If you email me before the workshop, please include:

- A screenshot of the full error message
- Your operating system (Mac/Windows)
- Your R version (run R.version.string in the Console)

That helps me diagnose quickly.