

# My fake manuscript

2024-09-13

## Introduction

This is my fake manuscript using iris dataset. I actually work on fish such as pink salmon (*Oncorhynchus gorbuscha*) but this manuscript is not about salmon. Here I am just demonstrating the cool skills I learned in class :)

I learned how to cite papers in rmd. For example, biodiversity is rapidly changing (Blowes et al. 2019), and glms are useful for understanding these changes (Bolker et al. 2009).

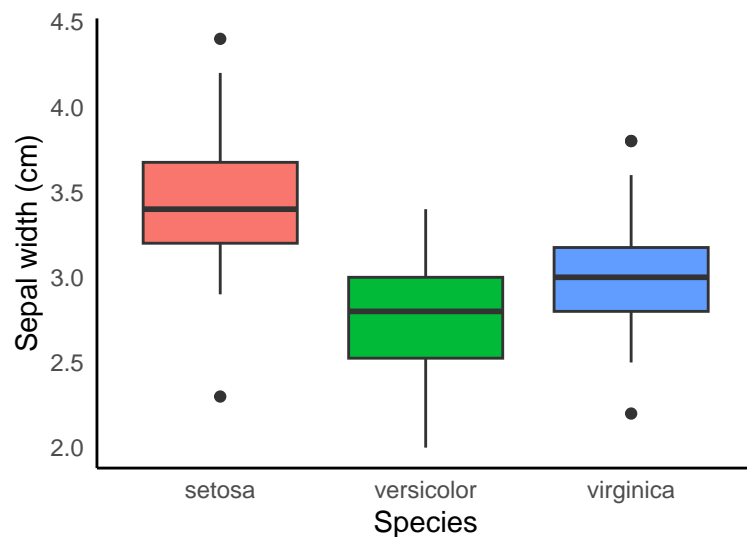
## Methods

I am using the Iris dataset (Fisher 1936) for my LDP project as an example.

We used R version 4.3.2 (R Core Team 2023) and the following R packages: knitr v. 1.48 (Xie 2014, 2015, 2024), renv v. 1.0.7 (Ushey and Wickham 2024), rmarkdown v. 2.27 (Xie, Allaire, and Golemund 2018; Xie, Dervieux, and Riederer 2020; Allaire et al. 2024), tidyverse v. 2.0.0 (Wickham et al. 2019).

## Results

I found that iris species vary in their sepal width (Figure 1). Pretend that this is another results sentence. And that this is another results sentence with super interesting results.



**Figure 1.** Boxplot of sepal width for each iris species.

Wow look how cool that boxplot looks. It would be great to see a summary stats table. Oh wait, the LDP team taught me how to do that. Let’s see if i can figure it out.

**Table 1.** Summary statistics of the iris dataset.

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
Min. :4.300	Min. :2.000	Min. :1.000	Min. :0.100	Length:150
1st Qu.:5.100	1st Qu.:2.800	1st Qu.:1.600	1st Qu.:0.300	Class :character
Median :5.800	Median :3.000	Median :4.350	Median :1.300	Mode :character
Mean :5.843	Mean :3.057	Mean :3.758	Mean :1.199	NA
3rd Qu.:6.400	3rd Qu.:3.300	3rd Qu.:5.100	3rd Qu.:1.800	NA
Max. :7.900	Max. :4.400	Max. :6.900	Max. :2.500	NA

## Discussion

That’s it for my sweet iris paper! Thanks for reading.

## References

- Allaire, JJ, Yihui Xie, Christophe Dervieux, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, et al. 2024. *rmarkdown: Dynamic Documents for r*. <https://github.com/rstudio/rmarkdown>.
- Blowes, Shane A., Sarah R. Supp, Laura H. Antão, Amanda Bates, Helge Bruelheide, Jonathan M. Chase, Faye Moyes, et al. 2019. “The Geography of Biodiversity Change in Marine and Terrestrial Assemblages.” *Science* 366 (6463): 339–45. <https://doi.org/10.1126/science.aaw1620>.
- Bolker, Benjamin M., Mollie E. Brooks, Connie J. Clark, Shane W. Geange, John R. Poulsen, M. Henry H. Stevens, and Jada-Simone S. White. 2009. “Generalized Linear Mixed Models: A Practical Guide for Ecology and Evolution.” *Trends in Ecology & Evolution* 24 (3): 127–35. <https://doi.org/10.1016/j.tree.2008.10.008>.
- Fisher, R. A. 1936. “The Use of Multiple Measurements in Taxonomic Problems.” *Annals of Eugenics* 7 (2): 179–88. <https://doi.org/10.1111/j.1469-1809.1936.tb02137.x>.
- R Core Team. 2023. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Ushey, Kevin, and Hadley Wickham. 2024. *renv: Project Environments*. <https://CRAN.R-project.org/package=renv>.
- Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D’Agostino McGowan, Romain François, Garrett Grolemond, et al. 2019. “Welcome to the tidyverse.” *Journal of Open Source Software* 4 (43): 1686. <https://doi.org/10.21105/joss.01686>.
- Xie, Yihui. 2014. “knitr: A Comprehensive Tool for Reproducible Research in R.” In *Implementing Reproducible Computational Research*, edited by Victoria Stodden, Friedrich Leisch, and Roger D. Peng. Chapman; Hall/CRC.
- . 2015. *Dynamic Documents with R and Knitr*. 2nd ed. Boca Raton, Florida: Chapman; Hall/CRC. <https://yihui.org/knitr/>.
- . 2024. *knitr: A General-Purpose Package for Dynamic Report Generation in r*. <https://yihui.org/knitr/>.
- Xie, Yihui, J. J. Allaire, and Garrett Grolemond. 2018. *R Markdown: The Definitive Guide*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown>.
- Xie, Yihui, Christophe Dervieux, and Emily Riederer. 2020. *R Markdown Cookbook*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown-cookbook>.