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 glmms are useful for understanding these changes (Bolker et al. 2009).

Methods

We used R version 4.3.2 (R Core Team 2023) and the following R packages: knitr v. 1.48 (Xie 2014, 2015, 2024), rmarkdown v. 2.27 (Xie, Allaire, and Grolemund 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.

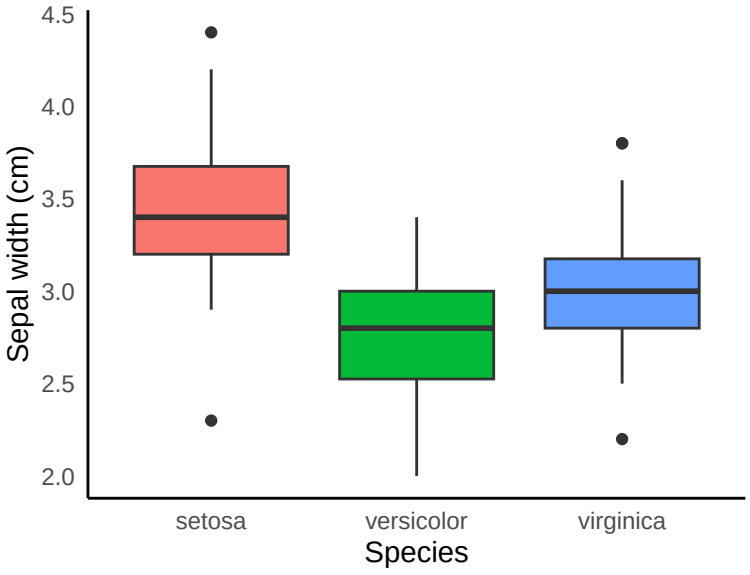

Figure 1. Boxplot of sepal width for each iris species.

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.

R Core Team. 2023. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, 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 Grolemund. 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.