### Session Info

#### Ivan Jacob Agaloos Pesigan

#### Session

```
sessionInfo()
#> R version 4.3.3 (2024-02-29)
#> Platform: x86_64-pc-linux-gnu (64-bit)
#> Running under: Ubuntu 22.04.4 LTS
#> Matrix products: default
#> BLAS: /usr/lib/x86_64-linux-gnu/openblas-pthread/libblas.so.3
#> LAPACK: /usr/lib/x86_64-linux-gnu/openblas-pthread/libopenblasp-r0.3.20.so; LAPACK version 3.10
#>
#> locale:
#> [1] LC_CTYPE=en_US.UTF-8
                              LC_NUMERIC=C
#> [3] LC_TIME=en_US.UTF-8
                               LC_COLLATE=en_US.UTF-8
#> [5] LC_MONETARY=en_US.UTF-8 LC_MESSAGES=en_US.UTF-8
#> [7] LC_PAPER=en_US.UTF-8
                             LC_NAME=C
#> [9] LC_ADDRESS=C
                              LC_TELEPHONE=C
#> [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
#>
#> time zone: Etc/UTC
#> tzcode source: system (glibc)
#> attached base packages:
base
#> other attached packages:
#> [1] rProject_0.0.9
#>
#> loaded via a namespace (and not attached):
#> [1] backports_1.4.1 R6_2.5.1
                               lubridate_1.9.3 xfun_0.42
#> [5] magrittr_2.0.3 glue_1.7.0 stringr_1.5.1 knitr_1.45
#> [9] timechange_0.3.0 generics_0.1.3 lifecycle_1.0.4 xml2_1.3.6
                                  compiler_4.3.3 highr_0.10
#> [13] cli_3.6.2.9000 bibtex_0.5.1
#> [17] rprojroot_2.0.4 plyr_1.8.9
                                     httr_1.4.7
                                                    tools_4.3.3
#> [21] evaluate_0.23 Rcpp_1.0.12
                                   RefManageR_1.4.0 rlang_1.1.3
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## References

R Core Team. (2023). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/