### Session Info

#### Ivan Jacob Agaloos Pesigan

#### Session

```
sessionInfo()
#> R version 4.4.1 (2024-06-14)
#> Platform: x86_64-pc-linux-gnu
#> 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:
#> [1] stats graphics grDevices utils datasets methods
                                                            base
#> other attached packages:
#> [1] rProject_0.0.13
#>
#> loaded via a namespace (and not attached):
#> [1] backports_1.5.0 R6_2.5.1
                               lubridate_1.9.3 xfun_0.46
#> [5] magrittr_2.0.3 glue_1.7.0 stringr_1.5.1 knitr_1.48
#> [9] timechange_0.3.0 generics_0.1.3 lifecycle_1.0.4 xml2_1.3.6
tools_4.4.1
#> [21] evaluate_0.24.0 Rcpp_1.0.13 RefManageR_1.4.0 rlang_1.1.4
```

# Packages

| unn | unname(installed.packages()[, 1]) |                 |               |               |                  |  |  |
|-----|-----------------------------------|-----------------|---------------|---------------|------------------|--|--|
| #>  | [1]                               | "devtools"      | "fitDTVARMx"  | "gert"        | "httr2"          |  |  |
| #>  | [5]                               | "Rcpp"          | "rProject"    | "tinytex"     | "xfun"           |  |  |
| #>  | [9]                               | "abind"         | "arrow"       | "ash"         | "AsioHeaders"    |  |  |
| #>  | [13]                              | "askpass"       | "assertthat"  | "backports"   | "base64enc"      |  |  |
| #>  |                                   | "betaDelta"     | "betaMC"      | "betaNB"      | "betaSandwich"   |  |  |
| #>  | [21]                              | "BH"            | "bibtex"      | "BiocManager" | "bit"            |  |  |
| #>  | [25]                              | "bit64"         | "bitops"      | "blob"        | "brew"           |  |  |
| #>  | [29]                              | "brio"          | "broom"       | "bslib"       | "cachem"         |  |  |
| #>  | [33]                              | "callr"         | "car"         | "caracas"     | "carData"        |  |  |
| #>  | [37]                              | "cellranger"    | "cffr"        | "checkmate"   | "cli"            |  |  |
| #>  | [41]                              |                 | "clock"       | "coda"        | "cOde"           |  |  |
| #>  | [45]                              | "collections"   | "colorspace"  | "commonmark"  | "conflicted"     |  |  |
| #>  | [49]                              | "corpcor"       | "covr"        | "cowplot"     | "cpp11"          |  |  |
| #>  |                                   | "crayon"        | "credentials" | "crosstalk"   | "cTMed"          |  |  |
| #>  | [57]                              | "ctsem"         | "curl"        | "cyclocomp"   | "data.table"     |  |  |
| #>  | [61]                              | "DBI"           | "dbplyr"      | "Deriv"       | "desc"           |  |  |
| #>  | [65]                              | "deSolve"       | "devtools"    | "diagram"     | "dials"          |  |  |
| #>  | [69]                              | "DiceDesign"    | "diffobj"     | "digest"      | "distributional" |  |  |
| #>  | [73]                              | "distro"        | "doBy"        | "docopt"      | "doFuture"       |  |  |
| #>  | [77]                              | "downlit"       | "dplyr"       | "DT"          | "dtplyr"         |  |  |
| #>  |                                   | "duckdb"        | "dynr"        | "dynUtils"    | "ellipse"        |  |  |
| #>  | [85]                              | "ellipsis"      | "evaluate"    | "expm"        | "fansi"          |  |  |
| #>  | [89]                              | "farver"        | "fastDummies" | "fastmap"     | "fclust"         |  |  |
| #>  | [93]                              | "fda"           | "fdrtool"     | "fds"         | "fitCTVARMx"     |  |  |
| #>  | [97]                              | "fitDTVARMx"    | "FNN"         | "fontawesome" | "forcats"        |  |  |
|     |                                   | "foreach"       | "Formula"     | "fs"          | "fst"            |  |  |
|     |                                   | "fstcore"       | "furrr"       | "future"      | "future.apply"   |  |  |
|     |                                   | "gargle"        | "generics"    | "gert"        | "ggplot2"        |  |  |
|     |                                   | "ggrepel"       | "gh"          | "gitcreds"    | "glasso"         |  |  |
|     |                                   | "glmnet"        | "globals"     | "glue"        | "googledrive"    |  |  |
|     |                                   | "googlesheets4" | "gower"       | "GPArotation" | "GPfit"          |  |  |
|     | [125]                             | 0               | "gsubfn"      | "gtable"      | "gtools"         |  |  |
|     |                                   | "hardhat"       | "haven"       | "hdrcde"      | "here"           |  |  |
|     |                                   | "highr"         | "Hmisc"       | "hms"         | "htmlTable"      |  |  |
|     | [137]                             |                 | "htmlwidgets" | "httpgd"      | "httpuv"         |  |  |
|     | [141]                             |                 | "httr2"       | "ids"         | "ifaTools"       |  |  |
| #>  | [145]                             | "igraph"        | "infer"       | "ini"         | "inline"         |  |  |
|     |                                   |                 |               |               |                  |  |  |

| #> | [149] | "ipred"        | "isoband"         | "iterators"     | "jomo"           |
|----|-------|----------------|-------------------|-----------------|------------------|
| #> | [153] | "jpeg"         | "jquerylib"       | "jsonlite"      | "jsonvalidate"   |
| #> | [157] | "kernlab"      | "knitr"           | "ks"            | "labeling"       |
| #> | [161] | "Lahman"       | "languageserver"  | "later"         | "latex2exp"      |
| #> | [165] | "lava"         | "lavaan"          | "lazyeval"      | "lhs"            |
| #> | [169] | "lifecycle"    | "lintr"           | "listenv"       | "littler"        |
| #> | [173] | "lme4"         | "locfit"          | "longMI"        | "loo"            |
| #> | [177] | "lubridate"    | "magick"          | "magrittr"      | "markdown"       |
| #> | [181] | "MatrixModels" | "matrixStats"     | "mclust"        | "memoise"        |
| #> | [185] | "metaSEM"      | "metaVAR"         | "mice"          | "microbenchmark" |
| #> | [189] | "mime"         | "miniUI"          | "minqa"         | "mitml"          |
| #> | [193] | "mize"         | "mnormt"          | "modeldata"     | "modelenv"       |
| #> | [197] | "modelr"       | "MplusAutomation" | "multicool"     | "munsell"        |
| #> | [201] | "mvtnorm"      | "nloptr"          | "numDeriv"      | "nycflights13"   |
| #> | [205] | "OpenMx"       | "openssl"         | "ordinal"       | "pan"            |
| #> | [209] |                | "parallelly"      | "parsnip"       | "patchwork"      |
| #> |       | "pbapply"      | "pbivnorm"        | "pbkrtest"      | "pcaPP"          |
| #> |       | "pdftools"     | "pillar"          | "pkgbuild"      | "pkgconfig"      |
| #> | [221] | "pkgdown"      | "pkgload"         | "plogr"         | "plyr"           |
| #> | [225] | "png"          | "posterior"       | "pracma"        | "praise"         |
| #> | [229] | "prettyunits"  | "printr"          | "processx"      | "prodlim"        |
| #> |       | "profvis"      | "progress"        | "progressr"     | "promises"       |
| #> | [237] | "proto"        | "ps"              | "psych"         | "purrr"          |
| #> | [241] | "qgraph"       | "qpdf"            | "quadprog"      | "quantreg"       |
| #> | [245] | "quarto"       | "QuickJSR"        | "R.cache"       | "R.methodsS3"    |
| #> |       | "R.oo"         | "R.utils"         | "R6"            | "ragg"           |
| #> | [253] | "rainbow"      | "rappdirs"        | "rbibutils"     | "rcmdcheck"      |
| #> | [257] | "RColorBrewer" | "Rcpp"            | "RcppArmadillo" | "RcppEigen"      |
| #> | [261] | "RcppGSL"      | "RcppParallel"    | "RcppTOML"      | "RCurl"          |
| #> | [265] | "Rdpack"       | "readr"           | "readxl"        | "recipes"        |
| #> | [269] | "RefManageR"   | "rematch"         | "rematch2"      | "remotes"        |
| #> | [273] | "reprex"       | "reshape2"        | "reticulate"    | "rex"            |
| #> | [277] | "rhub"         | "rlang"           | "RMariaDB"      | "rmarkdown"      |
| #> | [281] | "roxygen2"     | "rpf"             | "RPostgres"     | "rProject"       |
| #> | [285] | "rprojroot"    | "rsample"         | "RSQLite"       | "rstan"          |
| #> | [289] | "rstantools"   | "rstudioapi"      | "rversions"     | "rvest"          |
| #> | [293] | "Ryacas"       | "sass"            | "scales"        | "selectr"        |
| #> |       | "semlbci"      | "semmcci"         | "sessioninfo"   | "shape"          |
| #> |       | "shiny"        | "simStateSpace"   | "slider"        | "snow"           |
|    |       | "snowfall"     | "sourcetools"     | "SparseM"       | "SQUAREM"        |
|    |       | "StanHeaders"  | "statmod"         | "stringi"       | "stringr"        |
| #> |       | "styler"       | "symSEM"          | "sys"           | "systemfonts"    |
| #> |       | "tensorA"      | "testthat"        | "texreg"        | "textshaping"    |
| #> |       | "tibble"       | "tidymodels"      | "tidyr"         | "tidyselect"     |
| #> | [325] | "tidyverse"    | "timechange"      | "timeDate"      | "tinytex"        |
|    |       |                |                   |                 |                  |

| #> | [329] | "tune"       | "tzdb"      | "ucminf"       | "unigd"        |
|----|-------|--------------|-------------|----------------|----------------|
| #> | [333] | "urlchecker" | "usethis"   | "utf8"         | "uuid"         |
| #> | [337] | "V8"         | "vctrs"     | "viridis"      | "viridisLite"  |
| #> | [341] | "vroom"      | "waldo"     | "warp"         | "whisker"      |
| #> | [345] | "whoami"     | "withr"     | "workflows"    | "workflowsets" |
| #> | [349] | "xfun"       | "xml2"      | "xmlparsedata" | "xopen"        |
| #> | [353] | "xtable"     | "yaml"      | "yardstick"    | "zip"          |
| #> | [357] | "base"       | "boot"      | "class"        | "cluster"      |
| #> | [361] | "codetools"  | "compiler"  | "datasets"     | "foreign"      |
| #> | [365] | "graphics"   | "grDevices" | "grid"         | "KernSmooth"   |
| #> | [369] | "lattice"    | "MASS"      | "Matrix"       | "methods"      |
| #> | [373] | "mgcv"       | "nlme"      | "nnet"         | "parallel"     |
| #> | [377] | "rpart"      | "spatial"   | "splines"      | "stats"        |
| #> | [381] | "stats4"     | "survival"  | "tcltk"        | "tools"        |
| #> | [385] | "utils"      |             |                |                |

## References

R Core Team. (2024). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/