## 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
          / 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_0.45
#> [5] magrittr_2.0.3 glue_1.7.0
                                        stringr_1.5.1 knitr_1.47
#> [9] timechange_0.3.0 generics_0.1.3
                                       lifecycle_1.0.4 xml2_1.3.6
#> [13] cli_3.6.3.9000 bibtex_0.5.1
                                        compiler_4.4.1
                                                        highr_0.11
#> [17] rprojroot_2.0.4 plyr_1.8.9
                                        httr_1.4.7
                                                        tools_4.4.1
#> [21] evaluate_0.24.0 Rcpp_1.0.12
                                        RefManageR_1.4.0 rlang_1.1.4
#> [25] jsonlite_1.8.8 stringi_1.8.4
```

## **Packages**

```
unname(installed.packages()[, 1])
     [1] "metaVAR"
                            "abind"
                                               "arrow"
                                                                  "ash"
#>
     [5] "AsioHeaders"
                            "askpass"
                                               "assertthat"
                                                                 "backports"
#>
    [9] "base64enc"
                            "betaDelta"
                                               "betaMC"
                                                                 "betaNB"
    [13] "betaSandwich"
                            "BH"
                                               "bibtex"
                                                                 "BiocManager"
    [17] "bit"
                            "bit64"
                                               "bitops"
                                                                 "blob"
#> [21] "brew"
                            "brio"
                                               "broom"
                                                                  "bslib"
```

#>	[25]	"cachem"	"callr"	"car"	"caracas"
#>	[29]	"carData"	"cellranger"	"cffr"	"checkmate"
#>	[33]	"cli"	"clipr"	"clock"	"coda"
#>	[37]	"cOde"	"collections"	"colorspace"	"commonmark"
#>	[41]	"conflicted"	"corpcor"	"covr"	"cowplot"
#>	[45]	"cpp11"	"crayon"	"credentials"	"crosstalk"
#>	[49]	"cTMed"	"ctsem"	"curl"	"cyclocomp"
#>	[53]	"data.table"	"DBI"	"dbplyr"	"Deriv"
#>	[57]	"desc"	"deSolve"	"devtools"	"diagram"
#>	[61]	"dials"	"DiceDesign"	"diffobj"	"digest"
#>	[65]	"distributional"	"distro"	"doBy"	"docopt"
#>	[69]	"doFuture"	"downlit"	"dplyr"	"DT"
#>	[73]	"dtplyr"	"duckdb"	"dynr"	"dynUtils"
#>	[77]	"ellipse"	"ellipsis"	"evaluate"	"expm"
#>	[81]	"fansi"	"farver"	"fastDummies"	"fastmap"
#>	[85]	"fclust"	"fda"	"fdrtool"	"fds"
#>	[89]	"fitDTVARMx"	"FNN"	"fontawesome"	"forcats"
#>	[93]	"foreach"	"Formula"	"fs"	"fst"
#>	[97]	"fstcore"	"furrr"	"future"	"future.apply"
#>	[101]	"gargle"	"generics"	"gert"	"ggplot2"
#>	[105]	"ggrepel"	"gh"	"gitcreds"	"glasso"
#>	[109]	"glmnet"	"globals"	"glue"	"googledrive"
#>	[113]	"googlesheets4"	"gower"	"GPArotation"	"GPfit"
#>	[117]	"gridExtra"	"gsubfn"	"gtable"	"gtools"
#>	[121]	"hardhat"	"haven"	"hdrcde"	"here"
#>	[125]	"highr"	"Hmisc"	"hms"	"htmlTable"
#>	[129]	"htmltools"	"htmlwidgets"	"httpgd"	"httpuv"

#>	[133]	"httr"	"httr2"	"ids"	"ifaTools"
#>	[137]	"igraph"	"infer"	"ini"	"inline"
#>	[141]	"ipred"	"isoband"	"iterators"	"jomo"
#>	[145]	"jpeg"	"jquerylib"	"jsonlite"	"jsonvalidate"
#>	[149]	"kernlab"	"knitr"	"ks"	"labeling"
#>	[153]	"Lahman"	"languageserver"	"later"	"latex2exp"
#>	[157]	"lava"	"lavaan"	"lazyeval"	"lhs"
#>	[161]	"lifecycle"	"lintr"	"listenv"	"littler"
#>	[165]	"lme4"	"locfit"	"longMI"	"loo"
#>	[169]	"lubridate"	"magick"	"magrittr"	"markdown"
#>	[173]	"MatrixModels"	"matrixStats"	"mclust"	"memoise"
#>	[177]	"metaSEM"	"metaVAR"	"mice"	"microbenchmark"
#>	[181]	"mime"	"miniUI"	"minqa"	"mitml"
#>	[185]	"mize"	"mnormt"	"modeldata"	"modelenv"
#>	[189]	"modelr"	"MplusAutomation"	"multicool"	"munsell"
#>	[193]	"mvtnorm"	"nloptr"	"numDeriv"	"nycflights13"
#>	[107]	"OpenMx"	"openssl"	"ordinal"	"pan"
		opomin			
#>		"pander"	"parallelly"	"parsnip"	"patchwork"
	[201]	_	"parallelly"  "pbivnorm"	"parsnip" "pbkrtest"	"patchwork" "pcaPP"
#>	[201] [205]	"pander"			
#> #>	[201] [205] [209]	"pander" "pbapply"	"pbivnorm"	"pbkrtest"	"pcaPP"
#> #> #>	[201] [205] [209]	"pander" "pbapply" "pdftools" "pkgdown"	"pbivnorm" "pillar"	"pbkrtest" "pkgbuild"	"pcaPP" "pkgconfig"
#> #> #>	[201] [205] [209] [213] [217]	"pander" "pbapply" "pdftools" "pkgdown"	"pbivnorm" "pillar" "pkgload"	"pbkrtest" "pkgbuild" "plogr"	"pcaPP" "pkgconfig" "plyr"
#> #> #> #>	[201] [205] [209] [213] [217] [221]	"pander" "pbapply" "pdftools" "pkgdown" "png"	"pbivnorm"  "pillar"  "pkgload"  "posterior"	"pbkrtest"  "pkgbuild"  "plogr"  "pracma"	"pcaPP"  "pkgconfig"  "plyr"  "praise"
#> #> #> #> #>	[201] [205] [209] [213] [217] [221] [225]	"pander" "pbapply" "pdftools" "pkgdown" "png" "prettyunits"	"pbivnorm"  "pillar"  "pkgload"  "posterior"  "printr"	"pkgbuild" "plogr" "pracma" "processx"	"pcaPP"  "pkgconfig"  "plyr"  "praise"  "prodlim"
#> #> #> #> #>	[201] [205] [209] [213] [217] [221] [225] [229]	"pander" "pbapply" "pdftools" "pkgdown" "png" "prettyunits" "profvis"	"pbivnorm"  "pillar"  "pkgload"  "posterior"  "printr"  "progress"	"pkgbuild" "plogr" "pracma" "processx" "progressr"	"pcaPP"  "pkgconfig"  "plyr"  "praise"  "prodlim"  "promises"
#> #> #> #> #> #>	[201] [205] [209] [213] [217] [221] [225] [229] [233]	"pander" "pbapply" "pdftools" "pkgdown" "png" "prettyunits" "profvis"	"pbivnorm"  "pillar"  "pkgload"  "posterior"  "printr"  "progress"  "ps"	"pbkrtest"  "pkgbuild"  "plogr"  "pracma"  "processx"  "progressr"  "psych"	"pcaPP"  "pkgconfig"  "plyr"  "praise"  "prodlim"  "promises"  "purrr"

#>	[241]	"R.00"	"R.utils"	"R6"	"ragg"
#>	[245]	"rainbow"	"rappdirs"	"rbibutils"	"rcmdcheck"
#>	[249]	"RColorBrewer"	"Rcpp"	"RcppArmadillo"	"RcppEigen"
#>	[253]	"RcppGSL"	"RcppParallel"	"RcppTOML"	"RCurl"
#>	[257]	"Rdpack"	"readr"	"readxl"	"recipes"
#>	[261]	"RefManageR"	"rematch"	"rematch2"	"remotes"
#>	[265]	"reprex"	"reshape2"	"reticulate"	"rex"
#>	[269]	"rhub"	"rlang"	"RMariaDB"	"rmarkdown"
#>	[273]	"roxygen2"	"rpf"	"RPostgres"	"rProject"
#>	[277]	"rprojroot"	"rsample"	"RSQLite"	"rstan"
#>	[281]	"rstantools"	"rstudioapi"	"rversions"	"rvest"
#>	[285]	"Ryacas"	"sass"	"scales"	"selectr"
#>	[289]	"semlbci"	"semmcci"	"sessioninfo"	"shape"
#>	[293]	"shiny"	"simStateSpace"	"slider"	"snow"
#>	[297]	"snowfall"	"sourcetools"	"SparseM"	"SQUAREM"
#>	[301]	"StanHeaders"	"statmod"	"stringi"	"stringr"
#>	[305]	"styler"	"symSEM"	"sys"	"systemfonts"
#>	[309]	"tensorA"	"testthat"	"texreg"	"textshaping"
#>	[313]	"tibble"	"tidymodels"	"tidyr"	"tidyselect"
#>	[317]	"tidyverse"	"timechange"	"timeDate"	"tinytex"
#>	[321]	"tune"	"tzdb"	"ucminf"	"unigd"
#>	[325]	"urlchecker"	"usethis"	"utf8"	"uuid"
#>	[329]	"V8"	"vctrs"	"viridis"	"viridisLite"
#>	[333]	"vroom"	"waldo"	"warp"	"whisker"
#>	[337]	"whoami"	"withr"	"workflows"	"workflowsets"
#>	[341]	"xfun"	"xml2"	"xmlparsedata"	"xopen"
#>	[345]	"xtable"	"yaml"	"yardstick"	"zip"

#>	[349] '	"base"	"boot"	"class"	"cluster"
#>	[353] '	"codetools"	"compiler"	"datasets"	"foreign"
#>	[357] '	"graphics"	"grDevices"	"grid"	"KernSmooth"
#>	[361] '	"lattice"	"MASS"	"Matrix"	"methods"
#>	[365] '	"mgcv"	"nlme"	"nnet"	"parallel"
#>	[369] '	"rpart"	"spatial"	"splines"	"stats"
#>	[373] '	"stats4"	"survival"	"tcltk"	"tools"
#>	[377] '	"utils"			

# 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/