

README

Jeppe Ekstrand Halkjær Madsen

2023-12-22

Overview

- functions/functions.R: The functions that do the estimation with the EM algorithm.
- simulation_code/simulation.R: The file that runs the simulation. This takes a loong time. The results of the simulation are saved in the file intermediate_results/simresults.rds.
- simulation_code/table1.R: This file generates Table1 from the paper using the results from the simulation, i.e. the intermediate_results/simresults.rds data. The file is exported to results/table1.tex.
- results/table1.tex: The results as they are in the paper.

Environment

```
sessionInfo()
```

```
## R version 4.1.2 (2021-11-01)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Ubuntu 22.04.3 LTS
##
## Matrix products: default
## BLAS:   /usr/lib/x86_64-linux-gnu/blas/libblas.so.3.10.0
## LAPACK: /usr/lib/x86_64-linux-gnu/lapack/liblapack.so.3.10.0
##
## locale:
##  [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
##  [3] LC_TIME=da_DK.UTF-8      LC_COLLATE=en_US.UTF-8
##  [5] LC_MONETARY=da_DK.UTF-8  LC_MESSAGES=en_US.UTF-8
##  [7] LC_PAPER=da_DK.UTF-8     LC_NAME=C
##  [9] LC_ADDRESS=C             LC_TELEPHONE=C
## [11] LC_MEASUREMENT=da_DK.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] parallel  stats      graphics  grDevices  utils      datasets  methods
## [8] base
##
## other attached packages:
##  [1] doParallel_1.0.17 iterators_1.0.14 doRNG_1.8.6      rngtools_1.5.2
##  [5] foreach_1.5.2     lubridate_1.9.2  forcats_1.0.0    stringr_1.5.0
##  [9] dplyr_1.1.3       purrr_1.0.2     readr_2.1.4      tidyr_1.3.0
## [13] tibble_3.2.1      ggplot2_3.4.3   tidyverse_2.0.0  mets_1.3.2
## [17] timereg_2.0.5     survival_3.5-7   data.table_1.14.8
##
## loaded via a namespace (and not attached):
##  [1] tidyselect_1.2.0    xfun_0.40        listenv_0.9.0
##  [4] splines_4.1.2       lattice_0.21-8   colorspace_2.1-0
```

## [7]	vctrs_0.6.3	generics_0.1.3	htmltools_0.5.6
## [10]	yaml_2.3.7	utf8_1.2.3	rlang_1.1.1
## [13]	pillar_1.9.0	glue_1.6.2	withr_2.5.1
## [16]	lifecycle_1.0.3	lava_1.7.2.1	munsell_0.5.0
## [19]	gtable_0.3.4	future_1.33.0	mvtnorm_1.2-3
## [22]	codetools_0.2-19	evaluate_0.22	knitr_1.44
## [25]	tzdb_0.4.0	fastmap_1.1.1	fansi_1.0.4
## [28]	Rcpp_1.0.11	scales_1.2.1	parallelly_1.36.0
## [31]	hms_1.1.3	digest_0.6.33	stringi_1.7.12
## [34]	numDeriv_2016.8-1.1	grid_4.1.2	cli_3.6.1
## [37]	tools_4.1.2	magrittr_2.0.3	future.apply_1.11.0
## [40]	pkgconfig_2.0.3	Matrix_1.6-1.1	timechange_0.2.0
## [43]	rmarkdown_2.25	rstudioapi_0.15.0	R6_2.5.1
## [46]	globals_0.16.2	compiler_4.1.2	