simStateSpace: Simulate Data from State Space Models

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Description

Provides a streamlined and user-friendly framework for simulating data in state space models,

particularly when the number of subjects/units (n) exceeds one, a scenario commonly encountered

in social and behavioral sciences. For an introduction to state space models in social and behavioral

sciences, refer to Chow et al. (2010).

Installation

You can install the released version of simStateSpace from GitHub with:

install.packages("remotes")

remotes::install_github("jeksterslab/simStateSpace")

More Information

See GitHub Pages for package documentation.

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References

- Chow, S.-M., Ho, M.-h. R., Hamaker, E. L., & Dolan, C. V. (2010). Equivalence and differences between structural equation modeling and state-space modeling techniques. Structural Equation Modeling: A Multidisciplinary Journal, 17(2), 303–332. https://doi.org/10.1080/10705511003661553
- Pesigan, I. J. A., Russell, M. A., & Chow, S.-M. (2025). Inferences and effect sizes for direct, indirect, and total effects in continuous-time mediation models. *Psychological Methods*. https://doi.org/10.1037/met0000779
- R Core Team. (2025). R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/