

This folder holds the replication files for “Asymptotically Valid Bootstrap Inference for Proxy SVARs” by Carsten Jentsch and Kurt G. Lunsford. All files in this folder are for the Monte Carlo simulations in Section 5 of the paper.

All results are computed with Python. As part of the computations, we use NumPy, pandas, Matplotlib, Numba, and time packages, downloaded with Anaconda.

The Python files are as follows:

- `main_script.py`: The main script for computation.
  - This script runs the simulations. It needs to be run 3 different times: once for each data generating process in the paper. It produces the following Excel files:
    - `dgp1_results.xlsx`
    - `dgp2_results.xlsx`
    - `dgp3_results.xlsx`
- `proxy_svar_module.py`: A module with functions called by `main_script.py`.
- `utilities_module.py`: A module with functions called by `main_script.py`.
- `figure1_script.py`: This script produces Figure 1 in the paper.
  - It calls `dgp1_results.xlsx`, `dgp2_results.xlsx`, and `dgp3_results.xlsx`.
- `figure2_script.py`: This script produces Figure 2 in the paper.
  - It calls `dgp1_results.xlsx`.
- `figure3_script.py`: This script produces Figure3 in the paper.
  - It calls `dgp1_results.xlsx`, `dgp2_results.xlsx`, and `dgp3_results.xlsx`.

This folder also holds three Excel files, which have been precomputed: `dgp1_results.xlsx`, `dgp2_results.xlsx`, and `dgp3_results.xlsx`. They were computed using `main_script.py`.

Finally, this folder holds three .pdf files: `Figure1.pdf`, `Figure2.pdf`, and `Figure3.pdf`. They were produced with `figure1_script.py`, `figure2_script.py`, and `figure3_script.py`, respectively.