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Comparing statistical and machine learning methods for time series forecasting in data-driven logistics - a simulation study

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With the development of an Industry 4.0, logistics systems will increasingly implement data-driven, automated decision-making processes. In this context, the quality of forecasts with multiple time-dependent factors is of particular importance.

In this talk, we compare time series and machine learning algorithms in terms of out-of-the-box forecasting performance on a broadset of simulated time series. To mimic different scenarios from warehousing such as storage in- and output we simulate various linear and non-linear time series and investigate the one-step forecast performance of these methods.

Keywords

Forecasting, Machine Learning, Logistics

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