Time Series Cluster Kernel for Learning Similarities between Multivariate Time Series with Missing Data

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Highlights

The time series cluster kernel (TCK) for multivariate time series (MTS) is proposed.

Gaussian mixture model (GMM) ensemble learning for increased parameter robustness.

Robustness to missing data is ensured by extending the GMMs using informative priors.

We prove that the TCK is a valid kernel.

TCK outperforms established methods on missing data problems.