

Publications of the Unit "Big Data and Machine Learning"

2023

Scientific journals/Article

- Meng, X., Taylor, J. W., Ben taieb, S., & Li, S. (2023). Scores for Multivariate Distributions and Level Sets. "Operations Research".
Full Text : [2002.09578.pdf](#) (Open Access)
- Bosser, T., & Ben taieb, S. (2023). On the Predictive Accuracy of Neural Temporal Point Process Models for Continuous-time Event Data. "Transactions on Machine Learning Research".
Full Text : [2306.17066.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Bosser, T., & Ben taieb, S. (2023). Revisiting the Mark Conditional Independence Assumption in Neural Marked Temporal Point Processes. In "Proceedings of the 31st European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning". Louvain-La-Neuve, Belgium: i6doc.
doi:10.14428/esann/2023.es2023-64
Full Text : [ES2023-64.pdf](#) (Open Access)
- Dheur, V., & Ben taieb, S. (2023). A Large-Scale Study of Probabilistic Calibration in Neural Network Regression. In "The 40th International Conference on Machine Learning". PMLR.
Full Text : [2306.02738.pdf](#) (Open Access)

2022

Scientific journals/Article

- Ben Taieb, S., & Taylor, K. S. (April 2022). Commentary on "Transparent modelling of influenza incidence": On big data models for infectious disease forecasting. "International Journal of Forecasting, 38" (2), 625-627.
doi:10.1016/j.ijforecast.2021.02.003
Full Text : [IJF_Commentary.pdf](#) (Open Access)
- Petropoulos, F., Apiletti, D., Assimakopoulos, V., Babai, M. Z., Barrow, D. K., Ben Taieb, S., Bergmeir, C., Bessa, R. J., Bijak, J., Boylan, J. E., Browell, J., Carnevale, C., Castle, J. L., Cirillo, P., Clements, M. P., Cordeiro, C., Cyrino Oliveira, F. L., De Baets, S., Dokumentov, A., ... Ben Taieb, S. (2022). Forecasting: theory and practice. "International Journal of Forecasting". doi:10.1016/j.ijforecast.2021.11.001
Full Text : [FTP.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Ben Taieb, S. (2022). Learning Quantile Functions for Temporal Point Processes with Recurrent Neural Splines. In "The 25 th International Conference on Artificial Intelligence and Statistics (AISTATS) 2022". PMLR.
Full Text : [_ben-taieb22a.pdf](#) (Open Access)

2021

Scientific journals/Article

- Roach, C., Hyndman, R., & Ben Taieb, S. (03 February 2021). Non linear mixed effects models for time series forecasting of smart meter demand. "Journal of Forecasting, 40" (6), 1118-1130. doi:10.1002/for.2750
Full Text : [wp41-2020.pdf](#) (Open Access)

- Di Modica, C., Pinson, P., & Ben Taieb, S. (2021). Online forecast reconciliation in wind power prediction. "Electric Power Systems Research".
Full Text : [547.pdf](#) (Open Access)

2020

Scientific journals/Article

- Ben Taieb, S., Taylor, J. W., & Hyndman, R. J. (28 February 2020). Hierarchical Probabilistic Forecasting of Electricity Demand with Smart Meter Data. "Journal of the American Statistical Association, 0" (0).
Full Text : [2020_jasa_hts_prob.pdf](#) (Open Access)

2019

Scientific journals/Article

- Vicendese, D., Te Marvelde, L., D. McNair, P., Whitfield, K., R. English, D., Ben Taieb, S., Hyndman, R. J., & Thomas, R. (2019). Hospital characteristics, rather than surgical volume, predict length of stay following colorectal cancer surgery. "Australian and New Zealand Journal of Public Health".
Full Text : [Vicendese_et_al-2019-Australian_and_New_Zealand_Journal_of_Public_Health.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Ben Taieb, S., & Koo, B. (2019). Regularized regression for hierarchical forecasting without unbiasedness conditions. In "KDD '19: The 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining". New York, Unknown/unspecified: Association for Computing Machinery. doi:10.1145/3292500.3330976
Full Text : [2019_kdd_hts_reg.pdf](#) (Open Access)

2017

Scientific congresses and symposiums/Paper published in a book

- Ben taieb, S., Yu, J., Barreto, M., & Rajagopal, R. (2017). Regularization in Hierarchical Time Series Forecasting with Application to Electricity Smart Meter Data. In "Proceedings of the AAAI Conference on Artificial Intelligence". AAAI. doi:10.1609/aaai.v31i1.11167
- Ben taieb, S., Taylor, J. W., & Hyndman, R. J. (2017). Coherent Probabilistic Forecasts for Hierarchical Time Series. In "Proceedings of the 34th International Conference on Machine Learning". PMLR.
- Ben taieb, S. (2017). Sparse and Smooth Adjustments for Coherent Forecasts in Temporal Aggregation of Time Series. In "Proceedings of the Time Series Workshop at NIPS 2016". PMLR.

2015

Scientific congresses and symposiums/Paper published in a book

- Dehwah, A. H., Ben taieb, S., Shamma, J. S., & Claudel, C. G. (2015). Decentralized energy and power estimation in solar-powered wireless sensor networks. In "Proceedings - IEEE International Conference on Distributed Computing in Sensor Systems, DCOSS 2015". Institute of Electrical and Electronics Engineers Inc. doi:10.1109/DCOSS.2015.18

2014

Scientific congresses and symposiums/Paper published in a book

- Ben taieb, S., & Hyndman, R. (2014). Boosting multi-step autoregressive forecasts. In "Proceedings of the 31st International Conference on Machine Learning". PMLR.

2013

Scientific congresses and symposiums/Paper published in a book

- Bontempi, G., Ben taieb, S., & Le Borgne, Y.-A. (2013). Machine learning strategies for time series forecasting. In "Business Intelligence - Second European Summer School, eBISS 2012, Tutorial Lectures". Springer Verlag. doi:10.1007/978-3-642-36318-4_3

2012

Scientific journals/Article

- Ben taieb, S., Bontempi, G., Atiya, A. F., & Sorjamaa, A. (15 June 2012). A review and comparison of strategies for multi-step ahead time series forecasting based on the NN5 forecasting competition. "Expert Systems with Applications, 39" (8), 7067 - 7083. doi:10.1016/j.eswa.2012.01.039
Full Text : [areview.pdf](#) (Open Access)
- Vaccaro, A., Bontempi, G., Ben taieb, S., & Villacci, D. (February 2012). Adaptive local learning techniques for multiple-step-ahead wind speed forecasting. "Electric Power Systems Research, 83" (1), 129 - 135. doi:10.1016/j.epr.2011.10.008
Full Text : [1-s2.0-S0378779611002574-main.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Lacroix, G., Buisseret, F., Semay, C., & Cabrera, D. (2012). "Characterization of the pure-gluon phase in QCD.: Inclusion of the 2-body interactions thanks to the T-matrix formalism". Paper presented at Xth Quark Confinement and hadron spectrum, Munich, Germany.
Full Text : [Confinement X_196.pdf](#) (Open Access)

2011

Scientific journals/Article

- Bontempi, G., & Ben taieb, S. (July 2011). Conditionally dependent strategies for multiple-step-ahead prediction in local learning. "International Journal of Forecasting, 27" (3), 689 - 699. doi:10.1016/j.ijforecast.2010.09.004
Full Text : [1-s2.0-S0169207010001433-main.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Ben taieb, S., & Bontempi, G. (2011). Recursive multi-step time series forecasting by perturbing data. In "Proceedings - 11th IEEE International Conference on Data Mining, ICDM 2011". IEEE. doi:10.1109/ICDM.2011.123

2010

Scientific journals/Article

- Ben taieb, S., Sorjamaa, A., & Bontempi, G. (June 2010). Multiple-output modeling for multi-step-ahead time series forecasting. "Neurocomputing, 73" (10-12), 1950 - 1957. doi:10.1016/j.neucom.2009.11.030
Full Text : [multioutput.pdf](#) (Open Access)

2009

Scientific congresses and symposiums/Paper published in a book

- Ben taieb, S., Bontempi, G., Sorjamaa, A., & Lendasse, A. (2009). Long-term prediction of time series by combining direct and MIMO strategies. In "2009 International Joint Conference on Neural Networks, IJCNN 2009". IEEE. doi:10.1109/IJCNN.2009.5178802