Ángel López-Oriona

Conference Participations (Coauthor)

2022 42nd International Symposium on Forecasting (ISF 2022), Oxford, England: *Improving the Forecasting Accuracy of Global Models/Cross-Learning in Large Datasets by Finding Clusters of Similar Time Series*. Speaker: Pablo Montero-Manso.

2022 17th Conference of the International Federation of Classification Societies (IFCS 2022), Porto, Portugal: *Clusters based on Prediction Accuracy of Global Forecasting Models*. Speaker: Pablo Montero-Manso.

Conference Organizations

2021 13th International Conference on Fuzzy Computation Theory and Applications (FCTA 2021), Virtual. Chairman of Session 1A.

Other Talks

2022 Academic seminar at the Discipline of Business Analytics. The University of Sydney, Business School, Sydney, Australia: *Time series clustering based on prediction accuracy of global forecasting models*.

2022 Academic seminar at the Department of Mathematics and Statistics. Helmut Schmidt University, Hamburg, Germany: *Clustering of categorical time series through innovative distances*.

Software

R package mlmts: López-Oriona, Á., & Vilar, J. A. mlmts: Machine Learning Algorithms for Multivariate Time Series, r package version 1.1.1 (2023). URL `https://CRAN.R-project.org/package=mlmts`.

R package ctsfeatures: López-Oriona, Á., & Vilar, J. A. ctsfeatures: Analyzing Categorical Time Series, r package version 1.2.1 (2023). URL `https://CRAN.R-project.org/package=ctsfeatures`.

R package otsfeatures: López-Oriona, Á., & Vilar, J. A. otsfeatures: Ordinal Time Series Analysis, r package version 1.0.0 (2023). URL `https://CRAN.R-project.org/package=otsfeatures`.

Research Stays

PhD stays:

2021 Sapienza University of Rome, Faculty of Statistics. Department of Social and Economic Sciences. Rome, Italy.

- Three-month research stay working on fuzzy clustering of multivariate time series under the supervision of professor Pierpaolo D'Urso.

2022 The University of Sydney, Business School. Discipline of Business Analytics. Sydney, Australia.

- Three-month research stay working on time series clustering and forecasting under the supervision of lecturer Pablo Montero-Manso

2022 Helmut Schmidt University. Department of Mathematics and Statistics. Hamburg, Germany.
- Three-month research stay working on data mining for ordinal time series under the supervision of professor Christian H. Weiss.

2023 Lancaster University. Department of Mathematics and Statistics. Lancaster, United Kingdom.
- One-month research stay working on clustering of nonstationary time series under the supervision of lecturer Carolina Euan.

Courses and Workshops

An Introduction to Hidden Markov Models. Instructor: Franceso Lagona, University Roma Tre, Rome, Italy.

Awards and Honors

2021 Young researcher grant awarded by the European Society for Fuzzy Logic and Technology (EUSFLAT) for one of the best works presented by PhD students at the 13th International Workshop on Fuzzy Logic and Applications (WILF 2021).

2022 Award by the International Federation of Classification Societies (IFCS) for the best PhD/Postdoc paper at the 17th Conference of the International Federation of Classification Societies (IFCS 2022).

Grants

2020 Competitive grant for PhD students (2020-2022) awarded by the Center for Information and Communications Technology Research (CITIC).

2020 Competitive grant for PhD students (2020-2023) awarded by the Xunta de Galicia.

2021 Competitive grant for a research stay at Sapienza University of Rome awarded by the Xunta de Galicia.

2022 Competitive grant for a research stay at the University of Sydney awarded by the Research Center for Information and Communication Technologies (CITIC) of the University of A Coruña.

2022 Competitive grant for a research stay at the Helmut Schmidt University of Hamburg awarded by the company Inditex in collaboration with the University of A Coruña.

2023 Competitive grant for a research stay at Lancaster University awarded by the Research Center for Information and Communication Technologies (CITIC) of the University of A Coruña.

Research Projects

01/09/2021 - 31/08/2024 Flexible statistical methods in data science for complex and big data: theory and applications.
- Granting institution: Spanish Ministry of Science and Innovation.
- Duration: 3 years.
- Amount: €435,500.
- Principal investigators: Ricardo Cao Abad and Juan Manuel Vilar Fernández.
- Code: PID2020-113578RB-100.

Referee of the Following Journals

- *Annals of Operations Research*. (2 reviewed manuscripts)

- *Artificial Intelligence Review.* (1 reviewed manuscript)
- *Computational Statistics.* (1 reviewed manuscript)
- *Computational Statistics and Data Analysis.* (1 reviewed manuscript)
- *Expert Systems with Applications.* (1 reviewed manuscript)
- *Fuzzy Sets and Systems.* (1 reviewed manuscript)
- *IEEE Access* (1 reviewed manuscript)
- *Information Sciences* (2 reviewed manuscripts)
- *International Journal of Approximate Reasoning.* (1 reviewed manuscript)
- *Journal of Applied Statistics.* (1 reviewed manuscript)
- *Pattern Recognition* (1 reviewed manuscript)
- *Spatial Statistics.* (2 reviewed manuscripts)
- *Stochastic Environmental Research and Risk Assessment.* (1 reviewed manuscript)