

Luca Frigau

RESEARCH INTERESTS	Computational Statistics, Machine Learning, Statistical Learning, Image Analysis, Shape Analysis, Big Data, Regularization, Text Mining, Topic Modeling, Clustering, Classification, Semi-supervised modeling.
ACADEMIC POSITIONS	<p>University of Cagliari, Italy</p> <p>Associate Professor in Statistics October, 2024 to present Department of Economics and Business Sciences</p> <p>Assistant Professor in Statistics November, 2017 to September, 2024 Department of Economics and Business Sciences</p> <p>Postdoctoral Researcher in Statistics February to November, 2017 Department of Economics and Business Sciences Topic: <i>Decision Support System for Data Management</i></p> <p>Research Grant October, 2015 to March, 2016 Department of Economics and Business Sciences Topic: <i>Recursive Partitioning Algorithms for Multi-level Data and Causal Inference</i></p>
EDUCATION	<p>Charles University in Prague, Czech Republic</p> <p>Joint Ph.D., Probability and Mathematical Statistics March 2016 Joint supervision of thesis, supervisor Jaromir Antoch Title thesis: <i>Morpho-Colorimetric and Non-Parametric Analysis in Statistical Classification of Vascular Flora</i></p> <p>University of Cagliari, Italy</p> <p>Joint Ph.D., Environmental and Applied Botany March 2016 Joint supervision of thesis, supervisors Francesco Mola and Gianluigi Bacchetta Title thesis: <i>Morpho-Colorimetric and Non-Parametric Analysis in Statistical Classification of Vascular Flora</i></p> <p>M.S., Managerial Economics July 2010 Grade 110/110 <i>cum laude</i></p> <p>B.S., Economics and Business Management December 2008 Grade 110/110 <i>cum laude</i></p>
SPECIALIZATION COURSES	<p>Statistics Summer School (Rimini, Italy) May 22 to 26, 2017 <i>Summer School Classification and Data Analysis organized by CLADAG at University of Bologna. Teachers: Berthold Lausen and Hans-Hermann Bock</i></p> <p>Advanced course in R (Heidelberg, Germany) January 15 to 16, 2015 <i>Advanced Course: R programming and development organized by DataProgrammers at the European Molecular Biology Laboratory. Teachers: Laurent Gatto and Robert Stojnic</i></p> <p>Statistics Summer School (Gerona, Spain) July 7 to 11, 2014 <i>Summer School on Compositional Data Analysis organized by IASC-ERS at University of Gerona. Teachers: Juan José Egozcue, Vera Pawlowsky-Glahn, Carles Barceló-Vidal, Pepus Daunis-Estadella, Josep Antoni Martin-Fernandez Gloria Mateu-Figueras, Paula Brito and Michele Gallo</i></p>

Statistics Summer School (Cagliari, Italy) June 27 to July 7, 2011
Sardegna Statistics Summer School on Statistical Methods and Software for Large and Complex Data Sets and Business and Industrial Statistics organized by ISBIS at University of Cagliari. Teachers: William S. Cleveland, Jaromir Antoch, Roberta Siciliano, Jerome H. Friedman, Ray Kordupleski, Nick Fisher, Vincenzo Esposito Vinzi

MEMBERSHIPS

ISI - International Statistical Institute

ISBIS - International Society for Business and Industrial Statistics

y-BIS - Young Statistician's group in the ISBIS

SIS - Italian Statistical Society

CLADAG - Classification and Data Analysis Group of the Italian Statistical Society

ASA - Association for Applied Statistics

COMMITTEE
MEMBERSHIPS

ISBIS Executive: Liaison for ENBIS (2023–2025, 2025–2027)

Member of the Scientific Programme Committee of the 19th Scientific Meeting of the International Federation of Classification Societies (IFCS 2026)

Member of the Scientific Programme Committee of the Scientific Meeting of the International Society for Business and Industrial Statistics (ISBIS 2025)

Member of the Scientific Programme Committee of the 15th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (CLADAG 2025)

Member of the Local Organizing Committee of the Summer School in Advanced Statistical Learning for Preference, Ranking, and Ordinal Data (PrefStat 2024)

Member of the Scientific Programme Committee of the 8th Scientific Meeting of the European Conference on Data Analysis (ECDA 2022)

y-BIS Committee: Chair (2019–2021)

ISBIS Executive: Vice-President for y-BIS Members (2019–2021)

Coordinator of the University of Cagliari's Local Organizing Committee of the 50th Scientific Meeting of the Italian Statistical Society (SIS 2021)

Member of the Scientific Programme Committee of the 13th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (CLADAG 2021)

Member of the Scientific Programme Committee of the ISBIS Young Business and Industrial Statisticians Workshop on Recent Advances in Data Science and Business Analytics (y-BIS 2019)

Member of the Scientific Programme Committee of the ISBIS Young Business and Industrial Statisticians Workshop on Modern Methods in Insurance Pricing and Industrial Statistics (y-BIS 2017)

Member of the Local Organizing Committee of the 10th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (CLADAG 2015)

Member of the Local Organizing Committee of the 47th Scientific Meeting of the Italian Statistical Society (SIS 2014)

- PH.D. COMMITTEE SERVICE Member of the Committee of the Ph.D. of Economics and Business Sciences of the University of Cagliari October 1, 2019 to present
- Supervisor of thesis of **Andrea Carta**, XXXVII cycle of Ph.D. in Economics and Business Sciences of the University of Cagliari. Title of the thesis: *Essays on Non-parametric Prediction Models*.
- GRANT PROJECT MEMBERSHIPS Member (senior researcher) of the spoke 8 of the local unit of the Department of Economics and Business Sciences of the University of Cagliari of the multidisciplinary research project entitled “e.INS - Ecosystem of Innovation for Next Generation Sardinia”, Subject “Sustainable mobility”, founded by Piano Nazionale di Ripresa e Resilienza (PNRR) Partenariato Esteso - Investimento 1.5 (CUP ECS00000038).
- Member (senior researcher) of the spoke 7 of the local unit of the Department of Economics and Business Sciences of the University of Cagliari of the multidisciplinary research project entitled “GRINS - Growing Resilient Inclusive And Sustainable”, Subject 9 “Economic and financial sustainability of systems and territories”, founded by Piano Nazionale di Ripresa e Resilienza (PNRR) Partenariato Esteso - Investimento 1.3 (CUP F53C22000760007).
- Member (senior researcher) of the local unit of the Department of Economics and Business Sciences of the University of Cagliari of the multidisciplinary research project entitled “Statistical models for the study of the socio-economic situation in Sardinia induced by the Covid-19 pandemic. Applications and comparisons with other Italian regions”, funded by the Fondazione di Sardegna Annuity 2020. Coordinator: Prof. Monica Musio
- Member (senior researcher) of the local unit of the Department of Economics and Business Sciences of the University of Cagliari of the multidisciplinary research project entitled “Analysis of the economic and social impact of universities: the case of UniCA”, funded by the Fondazione di Sardegna Annuity 2018. Coordinator: Prof. Emanuela Marrocu
- Member (senior researcher) of the unit of the Department of Economics and Business Sciences of the University of Cagliari, industrial research project entitled “Research and Study Activities to implement, through scientific support, the activities of the Regional Monitoring Center of Road Safety for the purposes of the Functional Analysis of the Road Network of Sardinia”, funded by the Autonomous Region of Sardinia, Department of Public Works. Coordinators: Prof. Paolo Fadda and Prof. Italo Meloni
- Member (senior researcher) of the unit of the Department of Economics and Business Sciences of the University of Cagliari of the industrial research project entitled “Cagliari2020”, funded by the Ministry of Education, University and Research with a directorial decree prot . n. 391/Ric of July 5th, 2012 (grant No. MIUR_PON04a2.00381). Coordinator: Prof. Daniele Giusto
- Member (senior researcher) of the local unit of the Department of Economic and Business Sciences of the University of Cagliari of the industrial research and experimental development project aimed at the “Creation of an ICT platform to support the tourism sector”, funded by the Autonomous Region of Sardinia as part of the PIA Call - Integrated Facilitation Packages “Industry, Crafts and Services” (Annuity 2013), Unitary Programming 2007/2013 - PO FESR 2007/2013, Interventions to support competitiveness and innovation (grant No. PIA - 2013 No. 282/13). Coordinator: Prof. Francesco Mola

	<p>Member (senior researcher) of the local unit of the Department of Economic and Business Sciences of the University of Cagliari of the multidisciplinary research project entitled: “Ethereum Development Unraveled: A Blockchain of Communication”, funded by the Academic Grants Round 2023 of the Ethereum Foundation. Principal Investigators: Prof. Dr Silvia Bartolucci (UCL, London, UK), Dr Giuseppe Destefanis (Brunel University, London, UK), Dr Rumyana Neykova (Brunel University, London, UK) and Dr Marco Ortu (University of Cagliari, Italy)</p>
SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS	<p>Scientific director of the research project “The role of advanced statistics in the process of co-planning of interventions in support of non-self-sufficiency” funded by the National Social Security Institute as part of the notice of July 15th 2020 “Ricerca e selezione di Dottorati di ricerca Industria 4.0, Scienze statistiche e attuariali, Sviluppo sostenibile, Inps e Welfare”.</p> <p>Scientific director of the research project “VGAM for urban transport modeling” funded by the Regional Law of August 7th 2007, n. 7 “Promotion of Scientific Research and Technological Innovation in Sardinia” of the Autonomous Region of Sardinia for the financing of joint research projects to support the international mobility of young researchers. Activity program for the year 2019. CUP: F74I19000180002.</p> <p>Scientific director of the research project “Agent-based modeling for urban transport optimization” funded by the regional law August 7th, 2007, n. 7 “Promotion of Scientific Research and Technological Innovation in Sardinia” of the Autonomous Region of Sardinia for the financing of joint research projects to support the international mobility of young researchers. Activity program for the year 2017. CUP: F21I17000040002.</p>
RESPONSIBILITY FOR SCIENTIFIC STUDIES AND RESEARCH	<p>Responsible of the research project “Advances in Data Visualization” conducted in collaboration with prof. Adalbert F.X. Wilhelm (Jacobs University and Visiting Scientist at the University of Cagliari). The funding relating to the project was provided by the University of Cagliari (Directorate for Research and the Territory) for scientific research activities carried out by prof. Wilhelm in collaboration with researchers from the Department of “Economics and Business Sciences” and was funded by the University of Cagliari Progetto di Eccellenza Legge 232/2016 art. 1, commi 314-337.</p> <p>Responsible of the research project “Stochastic processes” conducted in collaboration with prof. Jaromir Antoch (Charles University in Prague and Visiting Scientist at the University of Cagliari). The funding relating to the project was provided by the University of Cagliari (Directorate for Research and the Territory) for scientific research activities carried out by prof. Antoch in collaboration with researchers from the Departments of “Mathematics and Computer Science” and “Economics and Business Sciences” and was funded by the University of Cagliari Progetto di Eccellenza Legge 232/2016 art. 1, commi 314-337.</p>
INSTITUTIONAL AND ADVISORY ROLES	<p>Member of the Regional Observatory on Poverty – Autonomous Region of Sardinia. Representative of the University of Cagliari for the 2025–2026 biennium in the activities of the Regional Observatory on Poverty, established by Regional Government Resolution No. 25/2 of June 30, 2021. The Observatory functions as a technical-advisory body, tasked with analyzing poverty and social exclusion phenomena within the regional context, formulating targeted policy proposals, and drafting an annual report to support public policy decisions. The contribution focuses on the statistical analysis of data, the development of quantitative indicators, and the assessment of the impact of measures aimed at reducing socio-economic hardship.</p> <p>Member of the Provincial Observatory – Prefecture of Cagliari. Representative of the University of Cagliari in the Observatory established with the Municipality of Cagliari</p>

under the Memorandum of Understanding aimed at countering organized crime infiltration in the tourism sector for the 2025–2027 three-year period. The role involves contributing to the systematic collection and monitoring of updated data, the application of statistical methods, algorithms, and predictive models to identify causes, correlations, and risk indicators, as well as the drafting of periodic reports to support anti-mafia prevention policies. Specific contributions focus on methodological development, the construction of quantitative indicators, and the assessment of the effectiveness of adopted measures, in addition to participation in training initiatives and workshops promoted by the Observatory.

VISITING
POSITIONS

The University of Auckland, New Zealand February to March, 2020
Visiting fellow at the Department of Statistics of The University of Auckland, New Zealand, invited by Prof. Thomas Yee for collaborating in developing methodologies on “generally-altered, -inflated and -truncated count distributions models”.

SAMSI, NC, USA March to April, 2019
Visiting fellow at Statistical and Applied Mathematical Sciences Institute (SAMSI), Research Triangle Park, NC USA, invited by Prof. David Banks for collaborating in developing “Optimization strategies for parameters estimation in Agent-based modeling”.

Charles University in Prague, Czech Republic December, 2017
Visiting fellow at the Department of Probability and Mathematical Statistics of Charles University in Prague, Czech Republic, invited by Prof. Jaromir Antoch for collaborating in the development of computationally efficient non-parametric methodologies for validating statistical image segmentation.

Duke University, NC, USA January to June, 2013
Visiting fellow at the Department of Statistical Science of Duke University, Durham, NC USA, invited by Prof. David Banks for collaborating in the development of methodologies on “multi-class classifier algorithms comparison” and “bias-correction in replenishment sampling”.

Charles University in Prague, Czech Republic October, 2011
Visiting fellow at the Department of Probability and Mathematical Statistics of Charles University in Prague, Czech Republic, invited by Prof. Jaromir Antoch for collaborating in developing of classification methodologies based on Fourier analysis.

PUBLICATIONS IN
PEER-REVIEWED
JOURNALS

1. Yee T, **Frigau L**, Ma C. (2025). Heaping and seeping, GAITD regression and doubly constrained reduced-rank vector generalized linear models, in smoking studies. *The Annals of Applied Statistics*, 1–25. Online first. ISSN: 1932-6157.
2. Carta A, **Frigau L**. (2025). Tree Oblique for Regression with Weighted Support Vector Machine. *Computational Statistics*, 1–35. Online first. ISSN: 1613-9658. DOI: [10.1007/s00180-025-01647-w](https://doi.org/10.1007/s00180-025-01647-w)
3. Monticone M, Arippa F, **Frigau L**, Foti C, Ferrari S, Guicciardi M, Rocca B (2025). Model of Fear of Movement/(re)injury Runs Clockwise from Catastrophizing: Evidence from a Sample of Outpatients with Chronic Nonspecific Low Back Pain. *American Journal of Physical Medicine & Rehabilitation*, 104(6): 506–510. ISSN: 1537-7385. DOI: [10.1097/PHM.0000000000002659](https://doi.org/10.1097/PHM.0000000000002659)
4. **Frigau L**, Contu G, Ortu M, Carta A. (2024). Gauging Airbnb Review Sentiments and Critical Key-Topics by Small Area Estimation. *Statistical Methods and Applications*, 33(4): 1145–1170. ISSN: 1613-981X. DOI: [10.1007/s10260-024-00764-y](https://doi.org/10.1007/s10260-024-00764-y)

5. **Frigau L**, Conversano C, Antoch J. (2024). PARSEG: A computationally efficient approach for statistical validation of botanical seeds' images. *Scientific Reports*, 14(1), 6052: 1–17. ISSN: 2045-2322. DOI: [10.1038/s41598-024-56228-6](https://doi.org/10.1038/s41598-024-56228-6)
6. Conversano C, **Frigau L**, Contu G. (2024). Overlapping coefficient in Network-based Semi-Supervised Clustering. *Computational Statistics*, 39(7): 3831–3854. ISSN: 1613-9658. DOI: [10.1007/s00180-024-01457-6](https://doi.org/10.1007/s00180-024-01457-6)
7. Ortu M, **Frigau L**, Contu G. (2024). Topic Based Quality Indexes Assessment Through Sentiment. *Computational Statistics*, 39: 289–311. ISSN: 1613-9658. DOI: [10.1007/s00180-022-01284-7](https://doi.org/10.1007/s00180-022-01284-7)
8. Zammarchi G, Carta A, Columbu S, **Frigau L**, Musio M. (2024). A scientometric analysis of the effect of COVID-19 on the spread of research outputs. *Quality & Quantity*, 58(3), 2265–2287. ISSN: 1573-7845. DOI: [10.1007/s11135-023-01742-4](https://doi.org/10.1007/s11135-023-01742-4)
9. Coppola F, **Frigau L**, Markelj J, Malesič J, Conversano C, Strlič M. (2023). Near-Infrared Spectroscopy and Machine Learning for Accurate Dating of Historical Books. *Journal of the American Chemical Society*, 145(22): 12305–12314. ISSN: 1520-5126. DOI: [10.1021/jacs.3c02835](https://doi.org/10.1021/jacs.3c02835)
10. **Frigau L**, Romano M, Contu G, Ortu M. (2023). Semi-Supervised Sentiment Clustering on Natural Language Texts. *Statistical Methods and Applications*, 32(4): 1239–1257. ISSN: 1613-981X. DOI: [10.1007/s10260-023-00691-4](https://doi.org/10.1007/s10260-023-00691-4)
11. Contu G, **Frigau L**, Conversano C. (2023). Price indicators for Airbnb accommodations. *Quality & Quantity*, 57(5): 4779–4802. ISSN: 1573-7845. DOI: [10.1007/s11135-022-01576-6](https://doi.org/10.1007/s11135-022-01576-6)
12. Contu G, **Frigau L**, Ortu M. (2023). VGLM proportional odds model to infer hosts' Airbnb performance. *Quality & Quantity*, 57(5): 4069–4094. ISSN: 1573-7845. DOI: [10.1007/s11135-022-01550-2](https://doi.org/10.1007/s11135-022-01550-2)
13. Frau M, Cabiddu F, **Frigau L**, Tomczyk P, Mola F. (2022). How emotions impact the interactive value formation process during problematic social media interactions. *Journal of Research in Interactive Marketing*, 17(5): 773–793. ISSN: 2040-7122. DOI: [10.1108/JRIM-06-2022-0186](https://doi.org/10.1108/JRIM-06-2022-0186)
14. Cadoni E, Ideo F, Marongiu G, Mezzena S, **Frigau L**, Mela Q, Capone A, Duncan HF, Cotti E. (2022). Periapical Status in Patients affected by Osteoporosis: a Retrospective Clinical Study. *Clinical and Experimental Dental Research*, 8(5): 1068–1075. ISSN: 2057-4347. DOI: [10.1002/cre2.604](https://doi.org/10.1002/cre2.604)
15. **Frigau L**, Wu Q, Banks D. (2022). Optimizing the JSM Program. *Journal of the American Statistical Association*, 117(538): 617–626. ISSN: 0162-1459. DOI: [10.1080/01621459.2021.1978466](https://doi.org/10.1080/01621459.2021.1978466)
16. Ekin T, **Frigau L**, Conversano C. (2021). Health Care Fraud Classifiers in Practice. *Applied Stochastic Models in Business and Industry*, 37(6): 1182–1199. ISSN: 1526-4025. DOI: [10.1002/asmb.2633](https://doi.org/10.1002/asmb.2633)
17. **Frigau L**, Conversano C, Mola F. (2021). Consistent validation of gray-level thresholding image segmentation algorithms based on machine learning classifiers. *Statistical Papers*, 62(3): 1363–1386. ISSN: 1613-9798. DOI: [10.1007/s00362-019-01138-3](https://doi.org/10.1007/s00362-019-01138-3)
18. Zammarchi G, Mola F, **Frigau L**. (2021). Markov chain to analyse web usability of a university website using eye tracking data. *Statistical Analysis and Data Mining*, 14(4): 331–341. ISSN: 1932-1872. DOI: [10.1002/sam.11512](https://doi.org/10.1002/sam.11512)

19. **Frigau L**, Contu G, Mola F, Conversano C. (2021). Network-based Semi Supervised Clustering. *Applied Stochastic Models in Business and Industry*, 37(2): 182–202. ISSN: 1526-4025. DOI: [10.1002/asmb.2618](https://doi.org/10.1002/asmb.2618)
20. Fadda P, Fancello G, **Frigau L**, Mandas M, Medda A, Mola F, Pelligra V, Porta M, Serra P. (2021). Investigating the Role of the Human Element in Maritime Accidents using Semi-Supervised Hierarchical Methods. *Transportation Research Procedia*, 52: 252–259. ISSN: 2352-1465. DOI: [10.1016/j.trpro.2021.01.029](https://doi.org/10.1016/j.trpro.2021.01.029)
21. Contu G, Conversano C, **Frigau L**, Mola F. (2020). Identifying factors affecting the probability of being a Superhost: evidence from Sardinia and Sicily. *Quality & Quantity*, 54: 1633–1653. ISSN: 1573-7845. DOI: [10.1007/s11135-019-00925-2](https://doi.org/10.1007/s11135-019-00925-2)
22. Contu G, **Frigau L**, Mola F, Romano M, Conversano C. (2020). University student achievements and international mobility. The case of University of Cagliari. *Electronic Journal of Applied Statistical Analysis*, 13(2): 474–497. ISSN: 2070-5948. DOI: [10.1285/i20705948v13n2p474](https://doi.org/10.1285/i20705948v13n2p474)
23. Monticone M, **Frigau L**, Vernon H, Rocca B, Giordano A, Vullo S, Mola F, Franchignoni F. (2020). Reliability, responsiveness and minimal clinically important difference of the two Fear Avoidance and Beliefs Questionnaire scales in Italian subjects with chronic low back pain undergoing multidisciplinary rehabilitation. *European Journal of Physical and Rehabilitation Medicine*, 56(5): 600–606. ISSN: 1973-9087. DOI: [10.23736/S1973-9087.20.06158-4](https://doi.org/10.23736/S1973-9087.20.06158-4)
24. Monticone M, **Frigau L**, Mola F, Rocca B, Franchignoni F, Vullo SS, Foti C, Chiarotto A. (2020). The Italian version of the Quebec Back Pain Disability Scale: cross-cultural adaptation, reliability and validity in patients with chronic low back pain. *European Spine Journal*, 29(3): 530–539. ISSN: 1432-0932. DOI: [10.1007/s00586-019-06153-4](https://doi.org/10.1007/s00586-019-06153-4)
25. Marongiu G, Leinardi L, Congia S, **Frigau L**, Mola F, Capone A. (2020). Reliability and reproducibility of the new AO/OTA 2018 classification system for proximal humeral fractures: a comparison of three different classification systems. *Journal of Orthopaedics and Traumatology*, 21(1): 1–9. ISSN: 1590-9921. DOI: [10.1186/s10195-020-0543-1](https://doi.org/10.1186/s10195-020-0543-1)
26. Monticone M, **Frigau L**, Mola F, Rocca B, Giordano A, Foti C, Franchignoni F. (2020). Italian versions of the Urogenital Distress Inventory-6 and Incontinence Impact Questionnaire-7: translation and validation in women with urinary incontinence. *Disability and Rehabilitation*, 43(20): 2930–2936. ISSN: 0963-8288. DOI: [10.1080/09638288.2020.1720319](https://doi.org/10.1080/09638288.2020.1720319)
27. **Frigau L**, Antoch J, Bacchetta G, Sarigu M, Uccesu M, Zaratina Alves C, Mola F. (2020). A statistical approach to the morphological classification of *Prunus* sp. seeds. *Plant Biosystems*, 154(6): 877–886. ISSN: 1126-3504. DOI: [10.1080/11263504.2019.1701126](https://doi.org/10.1080/11263504.2019.1701126)
28. Contu G, Conversano C, **Frigau L**, Mola F. (2019). The impact of Airbnb on hidden and sustainable tourism: the case of Italy. *International Journal of Tourism Policy*, 9(2): 99–130. ISSN: 1750-4104. DOI: [10.1504/IJTP.2019.102627](https://doi.org/10.1504/IJTP.2019.102627)
29. Verona M, Marongiu G, Cardoni G, Piras N, **Frigau L**, Capone A. (2019). Arthroscopically-assisted reduction and internal fixation (ARIF) versus open reduction and internal fixation (ORIF) for lateral tibial plateau fractures: a comparative retrospective study. *Journal of Orthopaedic Surgery and Research*, 14(155): 1–8. ISSN: 1749-799X. DOI: [10.1186/s13018-019-1186-x](https://doi.org/10.1186/s13018-019-1186-x)

30. Ferrari S, Vanti C, **Frigau L**, Guccione AA, Mola F, Ruggeri M, Pillastrini P, Monticone M. (2019). Sexual disability in patients with chronic non-specific low back pain – a multicenter retrospective analysis. *Journal of Physical Therapy Science*, 31(4): 360–365. ISSN: 2187-5626. DOI: [10.1589/jpts.31.360](https://doi.org/10.1589/jpts.31.360)
31. Monticone M, **Frigau L**, Sconza C, Foti C, Mola F, Respizzi S. (2019). Italian Version of the Risk Assessment and Prediction Tool: properties and usefulness of a decision-making tool for subjects’ discharge after total hip and knee arthroplasty. *International Journal of Statistics in Medical Research*, 8: 8–16. ISSN: 1929-6029. DOI: [10.6000/1929-6029.2019.08.02](https://doi.org/10.6000/1929-6029.2019.08.02)
32. Contu G, Conversano C, **Frigau L**, Mola F. (2019). Information content, interactivity and online popularity of the websites of World Heritage Sites: Evidence from France, Italy and Spain. *Tourism Culture & Communication*, 19(2): 111–133. ISSN: 1098-304X. DOI: [10.3727/194341419X15542065061478](https://doi.org/10.3727/194341419X15542065061478)
33. **Frigau L**, Medda T, Pelligra V. (2019). From the Field to the Lab. An Experiment on the Representativeness of Standard Laboratory Subjects. *Journal of Behavioral and Experimental Economics*, 78: 160–169. ISSN: 2214-8043. DOI: [10.1016/j.socec.2018.06.003](https://doi.org/10.1016/j.socec.2018.06.003)
34. Monticone M, Capone A, **Frigau L**, Marongiu G, Abelli P, Mola F, Maffulli N, Foti C. (2018). Development of the Italian version of the High-Activity Arthroplasty Score (HAAS-I) following hip and knee total arthroplasty: cross-cultural adaptation, reliability, validity and sensitivity to change. *Journal of Orthopaedic Surgery and Research*, 13(1): 1–8. ISSN: 1749-799X. DOI: [10.1186/s13018-018-0782-5](https://doi.org/10.1186/s13018-018-0782-5)
35. Mayoral O, Mascia F, Podda L, Laguna E, Fraga P, Rita J, **Frigau L**, Bacchetta G. (2018). Alien Plant Diversity in Mediterranean Wetlands: A Comparative Study within Valencian, Balearic and Sardinian Floras. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 46(2): 317–326. ISSN 1842-4309. DOI: [10.15835/nbha46210470](https://doi.org/10.15835/nbha46210470)
36. Monticone M, **Frigau L**, Vernon H, Rocca B. and Mola F. (2018). Responsiveness and minimal important change of the NeckPix in subjects with chronic neck pain undergoing rehabilitation. *European Spine Journal*, 27(6): 1324–1331. ISSN: 0940-6719. DOI: [10.1007/s00586-017-5343-9](https://doi.org/10.1007/s00586-017-5343-9)
37. Fancello G, Mola F, **Frigau L**, Serra P, Mancini S. and Fadda P. (2017). A new management scheme to support reverse logistics processes in the agrifood distribution sector. *Transportation Research Procedia*, 25: 695–715. ISSN: 2352-1465. DOI: [10.1016/j.trpro.2017.05.452](https://doi.org/10.1016/j.trpro.2017.05.452)
38. Santo A, Mattana E, **Frigau L**, Marzo Pastor A, Picher Morellò MC, Bacchetta G. (2017). Effects of NaCl stress on seed germination and seedling development of Brassica insularis Moris (Brassicaceae). *Plant Biology*, 19(3): 368–376. ISSN: 1438-8677. DOI: [10.1111/plb.12539](https://doi.org/10.1111/plb.12539)
39. Mola F, Antoch J, **Frigau L**, Conversano C. (2016). Classification of Image Background Subtraction in Image Segmentation. *Acta Universitatis Palackianae Olomucensis. Gymnica*, 55(1): 73–86. ISSN: 2336-4912. DOI: [10.33388.dmlcz/145819](https://doi.org/10.33388.dmlcz/145819)
40. Pani C, Fadda P, Fancello G, **Frigau L**, Mola F. (2014). A data mining approach to forecast late arrivals in a transshipment container terminal. *Transport*, 29(2): 175–184. ISSN: 1648-4142. DOI: [10.3846/16484142.2014.930714](https://doi.org/10.3846/16484142.2014.930714)
41. Santo A, Mattana E, **Frigau L**, Bacchetta G. (2014). Light, temperature, dry after-ripening and salt stress effects on seed germination of Phleum sardoum

(Hackel) Hackel. *Plant Species Biology*, 29: 300–305. ISSN: 1442-1984. DOI: [10.1111/1442-1984.12018](https://doi.org/10.1111/1442-1984.12018)

42. Andrews E, **Frigau L**, Voyvodic-Casabo C, Voyvodic J, Wright J. (2013). Multilingualism and fMRI: Longitudinal Study of Second Language Acquisition. *Brain Sciences*, 3(2): 849–876. ISSN: 2076-3425. DOI: [10.3390/brainsci3020849](https://doi.org/10.3390/brainsci3020849)

BOOK CHAPTERS

1. Carta A and **Frigau L**. (2025). Weighted Logistic Oblique Tree for Regression. *Supervised and Unsupervised Statistical Data Analysis*, pp. 70–82. Springer, Cham. ISBN: 978-3-032-03042-9. DOI: [10.1007/978-3-032-03042-9_7](https://doi.org/10.1007/978-3-032-03042-9_7)
2. Frau M, **Frigau L**, Cabiddu F, Mola F. (2023). Value Co-creation or Value Co-destruction? the Role of Negative Emotions in Consumer-Firm Interaction in the Social Media Platform. In: Wang, C.L. (eds), *The Palgrave Handbook of Interactive Marketing*, pp. 987–1011. Palgrave Macmillan, Cham. ISBN: 978-3-031-14961-0. DOI: [10.1007/978-3-031-14961-0_42](https://doi.org/10.1007/978-3-031-14961-0_42)
3. Zammarchi G, Contu G, **Frigau L**. (2021). Using eye-tracking to evaluate the viewing behavior on tourist landscapes. *ASA 2021 Statistics and Information Systems for Policy Evaluation*, pp. 141–146. Firenze University Press, Florence. ISBN: 978-88-5518-304-8. DOI: [10.36253/978-88-5518-304-8.28](https://doi.org/10.36253/978-88-5518-304-8.28)
4. Contu G, **Frigau L**, Romano M. (2019). Four community detection algorithms for direct and indirect graphs. *Il Mondo che cambia*, pp. 250–262. Franco Angeli, Milano. ISBN: 9788891798701.
5. Zammarchi G, Mola F, Contu G, **Frigau L**. (2019). Valutazione della web usability attraverso l'eye tracking: il caso studio del portale dell'Università di Cagliari. *Il Mondo che cambia*, pp. 278–290. Franco Angeli, Milano. ISBN: 9788891798701.
6. Contu G and **Frigau L**. (2018). Comparison of Cluster Analysis Approaches for Binary Data. *Classification, (Big) Data Analysis and Statistical Learning*, pp. 155–162. Springer, Cham. ISBN: 978-3-319-55708-3. DOI: [10.1007/978-3-319-55708-3_17](https://doi.org/10.1007/978-3-319-55708-3_17)
7. Mola F, Conversano C, Fadda A, **Frigau L**. (2017). Analisi quantitativa e identificazione di tipologie della specialità sarda, in Coinu G, Demuro G, Mola F (edited by), *La specialità sarda alla prova della crisi globale*, pp. 11–62. ESI Editore, Napoli. ISBN: 978-88-495-3371-2.
8. **Frigau L**, Conversano C. and Mola F. (2016). Assessing the reliability of a multi-class classifier. *Analysis of Large and Complex Data*, pp. 207–217. Springer, Cham. ISBN: 978-3-319-25226-1. DOI: [10.1007/978-3-319-25226-1_18](https://doi.org/10.1007/978-3-319-25226-1_18)
9. Mola F, Fadda A, **Frigau L**, Cesaracciu M, Piludu E. (2013). L'indagine statistica, in Demuro G, Mola F, Ruggiu I (edited by), *Identità e Autonomia in Sardegna e Scozia*, pp. 15–50. Maggioli Editore. ISBN: 978-88-387-8243-5.

CONFERENCE PROCEEDINGS

1. **Frigau L**. (2025). Local Optimization-Based Clustering. *CLADAG VOC 2025 - Book of Abstract*, p. 258. ISBN: 978-8-899594-24-4.
2. Carta A, **Frigau L**. (2025). Weighted Logistic Oblique Tree For Regression. *CLADAG VOC 2025 - Book of Abstract*, p. 202. ISBN: 978-8-899594-24-4.
3. Carta A, **Frigau L**. (2025). Feature-Selective Oblique Trees for Regression: Application to STEM Graduate Wage Prediction in Italy. *ICSTA 2025 - Proceedings of the 7th International Conference on Statistics: Theory and Applications*, paper n. 149. ISBN: 978-1-990800-59-7. DOI: [10.11159/icsta25.149](https://doi.org/10.11159/icsta25.149)

4. **Frigau L**, Contu G, Ortu M, Mola F. (2025). Exploring Spatial Disparities and Gaps in Transportation and Mobility through Airbnb Reviews: A Sardinian Case Study. *IES 2025 - Book of Short Papers*, pp. 410-417. ISBN 978-88-5495-849-4.
5. Contu G, **Frigau L**, Ortu M, Mola F. (2025). A Markov chain approach to investigate the Tourists movements: the case of Sardinia. *IES 2025 - Book of Short Papers*, pp. 1296-1302. ISBN 978-88-5495-849-4.
6. Ortu M, Contu G, **Frigau L**. (2025). From Self-Perception to Feedback: Mapping Sustainability-Oriented Self-Descriptions to Airbnb Reviews. *IES 2025 - Book of Short Papers*, pp. 1349-1355. ISBN 978-88-5495-849-4.
7. Yee T, **Frigau L**, Ma C. (2024). Heaping and seeping, GAITD regression and doubly constrained reduced rank vector generalized linear models, in smoking studies. *NZSA 2024 - Presenters and Abstracts booklet*, pp. 38.
8. **Frigau L**. (2024). Enhancing Time Slot Efficiency in Scientific Conferences by Employing Latent Dirichlet Allocation. *ODS 2024 - Book of Abstracts*, pp. 151.
9. Ortu M, **Frigau L**, Contu G. (2023). Multivariate Regression Tree Topic Modeling. *CLADAG 2023 Book of Abstracts and Short Papers*, pp. 573–576. ISBN 978-88-919-3563-2.
10. **Frigau L**, Contu G, Ortu M, Carta A. (2023). A Method to Validate Clustering Partitions. *CLADAG 2023 Book of Abstracts and Short Papers*, pp. 473–476. ISBN 978-88-919-3563-2.
11. Coppola F, **Frigau L**, Markelj J, Malešič J, Conversano C, Strlič M. (2023). Machine learning and NIR spectroscopy for dating of books. *TECHNART2023 Book of Abstracts*, p. 67. ISBN 978-989-9164-08-6.
12. Contu G, **Frigau L**, Ortu M, Pau S. (2023). Multivariate Regression Tree to Investigate the Italian Mortality Rates. *CLADAG 2023 Book of Abstracts and Short Papers*, pp. 394–397. ISBN 978-88-919-3563-2.
13. **Frigau L**. (2022). Optimizing time slots in scientific meetings: a Latent Dirichlet allocation approach. *SIS 2022 Book of the Short Papers*, pp. 110–120. ISBN 978-88-919-3231-0.
14. Contu G, **Frigau L**, Romano M, Ortu M. (2022). A semi-supervised clustering method to extract information from the electronic Word Of Mouth. *SIS 2022 Book of the Short Papers*, pp. 1558–1563. ISBN 978-88-919-3231-0.
15. **Frigau L**, Contu G, Ortu M. (2022). The Algorithm of NeSSC for Semisupervised Clustering. *ISBIS 2022 Book of Short Papers*, pp. 49. ISBN 979-12-210-1389-4.
16. Contu G, **Frigau L**, Zammarchi G. (2022). A Statistical Model to Estimate the Airbnb Price. *ISBIS 2022 Book of Short Papers*, pp. 61. ISBN 979-12-210-1389-4.
17. Ortu M, **Frigau L**, Contu G. (2022). Explaining Student Satisfaction Assessments: A Natural Language Processing Approach. *IES 2022 Book of Short Papers*, pp. 313–318. ISBN 978-88-94593-36-5.
18. Zammarchi G, Contu G, **Frigau L**. (2021). Application of machine learning models to discriminate tourist landscapes using eye-tracking data. *ENBIS 2021 Book of Abstracts*, pp. 12–13. ISBN 979-12-20093-98-9.
19. Conversano C, Contu G, **Frigau L**, Cappelli C. (2021). Network-based Semi-supervised Clustering of Time Series Data. *CLADAG 2021 Book of Abstracts and Short Papers*, pp. 62–63. Firenze University Press. ISBN: 978-88-5518-340-6. DOI: 10.36253/978-88-5518-340-6

20. Contu G, **Frigau L**, Zammarchi G, Mola F. (2021). A statistical model to identify the price determinations: the case of Airbnb. *Book of Short Papers SIS 2021*, pp. 1100–1105. Pearson. ISBN: 978-889-1927-36-1.
21. Contu G, **Frigau L**. (2020). Statistical modeling for some features of Airbnb activity. *Book of Short Papers SIS 2020*, pp. 1537–1542. Published by Pearson. ISBN: 978-889-1910-77-6.
22. **Frigau L**, Mola F, Contu G. (2019). Classification-based Approach for Validating Image Segmentation Algorithms. *Proceedings of y-BIS 2019*, pp. 42. Mimar Sinan Fine Arts University Publications, Istanbul. ISBN: 978-605-5005-95-5.
23. Contu G, **Frigau L**, Conversano C. (2019). Network-based Semisupervised Clustering. *Proceedings of y-BIS 2019*, pp. 44. Mimar Sinan Fine Arts University Publications, Istanbul. ISBN: 978-605-5005-95-5.
24. **Frigau L**, Contu G, Mola F, Conversano C. (2019). A statistical learning model for Airbnb’s hosts. *Book of Abstracts of ISI 2019*.
25. **Frigau L**, Banks D. (2019). Regularization in tree-based classification models. *Book of Abstracts of ISBIS 2019*.
26. Romano M, **Frigau L**, Contu G, Mola F, Conversano C. (2019). Customer Satisfaction from Booking. *GARR_18 Conference - Data (R)evolution - Selected Papers*, pp. 111–118. Associazione Consortium GARR, Roma. ISBN: 978-88-905077-8-6. DOI: [10.26314/GARR-Conf18-proceedings-21](https://doi.org/10.26314/GARR-Conf18-proceedings-21)
27. Frau M, **Frigau L**, Serpi S, Cabiddu F. (2019). Value Co-Destruction: a Text-Mining-Based Mixed Method Study on Social Media Interactions. *Proceedings of the 20th International Conference Marketing Trends 2019 Venice*. ed. Jean-Claude Andreani and Umberto Collesei, Paris-Venice Marketing Trends Association. ISBN: 978-2-490372-06-5.
28. Conversano C, Contu G, **Frigau L**, Mola F. (2018). Semisupervised Clustering through Recursive Partitioning and Complex Networks. *Book of Abstracts of ECDA 2018*.
29. **Frigau L**. (2018). Comparison of Non-parametric Approaches in Classification of Seeds. *Book of Abstracts of ISBIS 2018*.
30. **Frigau L**, Conversano C, Mola F. (2017). Combined methods in multi-label classification algorithms. *Proceedings of CLADAG 2017*. Universitas Studiorum, Mantova. ISBN: 978-88-99459-71-0.
31. Antoch J, Conversano C, **Frigau L**, Mola F. (2017). Validation of Experiments Involving Image Segmentation of Botanic Seeds. *Proceedings of CLADAG 2017*. Universitas Studiorum, Mantova. ISBN: 978-88-99459-71-0.
32. **Frigau L**. (2017). The SASSC Algorithm: an Application to Insurance Data. *Book of Abstracts of MIPIS 2017*.
33. **Frigau L**, Contu G, Mola F. (2017). Advances in sequential automatic search of subset of classifiers. *Book of Abstracts of IFCS 2017*.
34. Contu G, **Frigau L**, Conversano C. (2017). A statistical model for supporting AirB&B hosts activity. *Book of Abstracts of IFCS 2017*.
35. **Frigau L**, Mola F, Conversano C. (2016). Validating image segmentation of botanical seeds. *Book of Abstracts of Statistische-Woche 2016*.

36. **Frigau L**, Conversano C, Mola F. (2016). Evaluating the Effectiveness of an Image Segmentation method. *Book of Abstracts of ISBIS 2016*, p. 43. ISBN: 978-972-674-795-6.
37. Mola F, Antoch J, **Frigau L**, Conversano C. (2015). Background Subtraction in Image Segmentation. *Book of Abstracts of ODAM 2015*.
38. **Frigau L**. (2015). A note on the reliability of a classifier. *Proceedings of CLADAG 2015*, pp. 366–369. CUEC, Cagliari. ISBN: 978-88-8467-749-9.
39. **Frigau L**, Conversano C and Mola F. (2015). Improving the performance of image segmentation methods through background subtraction. *Proceedings of ISI 2015*, pp. 56–61. International Statistical Institute, The Hague. ISBN: 978-90-73592-35-3.
40. **Frigau L**, Conversano C, Mola F. (2014). A Bivariate Cost-sensitive Classifier Performance Index. *Proceedings of COMPSTAT 2014*, pp. 577–584. International Statistical Institute, The Hague. ISBN: 978-2-8399-1347-8.
41. **Frigau L**, Conversano C and Mola F. (2014). A Bivariate Cost-sensitive Classifier Performance Index. *Book of Abstracts of COMPSTAT 2014*.
42. **Frigau L**, Conversano C and Mola F. (2014). Assessing the Reliability of a Multi-class Classifier. *Book of Abstracts of ECDA 2014*.
43. Cannas M, Fadda P, Fancello G, **Frigau L**, Mola F, Pani C. (2013). Delay prediction in container terminals: A comparison of machine learning methods. *Proceedings of the WCTR (World Conference on Transport Research)*. ISBN: 978-85-285-0232-9.
44. **Frigau L**, Pani C. (2012). Extracting Information in a Transshipment Container Terminal Data Set: an Interaction between Graphical Tools and Statistical Models. *Book of Abstracts of ISBIS 2012*.

CONFERENCE
PRESENTATIONS

1. CLADAG 2025 - 15th Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society, presentation title *Local Optimization-Based Clustering*. September 8–10, 2025. Naples, Italy.
2. IES 2025 - 12th Scientific Meeting of the Statistics for the Evaluation and Quality of Services Group of the Italian Statistical Society, (**invited**) presentation title *Exploring Spatial Disparities and Gaps in Transportation and Mobility through Airbnb Reviews: A Sardinian Case Study*. June 25–27, 2025. Bressanone, Italy.
3. ODS 2024 - The International Conference on Optimization and Decision Science, presentation title *Enhancing Time Slot Efficiency in Scientific Conferences by Employing Latent Dirichlet Allocation*. September 8–12, 2024. Badesi, Italy.
4. CLADAG 2023 - 14th Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society, presentation title *A Method to Validate Clustering Partitions*. September 11–13, 2023. Salerno, Italy.
5. SIS 2022 - 51st Scientific Meeting of the Italian Statistical Society, (**invited**) presentation title *Optimizing time slots in scientific meetings: a Latent Dirichlet allocation approach*. June 22–24, 2022. Caserta, Italy.
6. ISBIS 2022 - International Society for Business and Industrial Statistics 2022, (**invited**) presentation title *The algorithm of NeSSC for semisupervised clustering*. June 20–21, 2022. Naples, Italy.

7. ISI 2021 - 63rd International Statistical Institute World Statistics Congress (**invited**) presentation title *Semisupervised Clustering via Community Detection Algorithms*. July 13, 2021. Held online.
8. ISBIS 2021 - International Society for Business and Industrial Statistics 2021 Satellite Conference, presentation title *Network-based Semi Supervised Clustering*. May 7, 2021. Held online.
9. MBC2 2020 - 5th Workshop on Model Based Clustering and Classification, presentation title *Tree-based community detection clustering*. September, 2020. Held online, hosted by University of Catania, Italy.
10. y-BIS 2019 - ISBIS Young Business and Industrial Statisticians Workshop on Recent Advances in Data Science and Business Analytics (**invited**) presentation title *Classification-based approach for validating image segmentation algorithms*. September 25–28, 2019. Istanbul, Turkey.
11. ISI 2019 - 62nd International Statistical Institute World Statistics Congress (**invited**) presentation title *A statistical learning model for Airbnb's hosts*. August 18–23, 2019. Kuala Lumpur, Malaysia.
12. ISBIS 2019 - International Society for Business and Industrial Statistics 2019 Satellite Conference (**invited**) presentation title *Regularization in tree-based classification models*. August 15–16, 2019. Kuala Lumpur, Malaysia.
13. ISBIS 2018 - International Society for Business and Industrial Statistics 2018 Conference, presentation title *Comparison of Non-parametric Approaches in Classification of Seeds*. July 4–6, 2018. Piraeus, Greece.
14. AISRe 2017 - XXXVIII Annual scientific conference Innovation, urban systems and regional growth New development paths beyond the crisis (**invited**) presentation title *Airbnb and Hidden Tourism: a Different Lecture of Touristic Flows in Sardinia*. September 20–22, 2017. Cagliari, Italy.
15. CLADAG 2017 - 11th Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society (**invited**) presentation title *Combined Methods in Multi-label Classification Algorithms*. September 13–15, 2017. Milan, Italy.
16. IFCS 2017 - 15th conference of the International Federation of Classification Societies, presentation title *Advances in sequential automatic search of subset of classifiers*. August 8–10, 2017. Tokyo, Japan.
17. Statistische-Woche 2016, Sessions of the German Society for Demography on the topic, presentation title *Validating Image Segmentation of Botanical Seeds*. September 13–16, 2016. Augsburg, Germany.
18. ISBIS 2016 - International Society for Business and Industrial Statistics 2016 Conference (**invited**) presentation title *Evaluating the Effectiveness of an Image Segmentation Method*. June 8–10, 2016. Barcelona, Spain.
19. CLADAG 2015 - 10th Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society, presentation title *A Note on the Reliability of a Classifier*. October 8–10, 2015. Cagliari, Italy.
20. ISI 2015 - 60th International Statistical Institute World Statistics Congress (**invited**) presentation title *Background subtraction in image segmentation*. July 26–31, 2015. Rio de Janeiro, Brazil.

21. COMPSTAT 2014 - 21st International Conference on Computational Statistics, presentation title *A Bivariate Cost-Sensitive Classifier Performance Index*. August 19–22, 2014. Geneva, Switzerland.
22. ECDA 2014 - Second European Conference on Data Analysis, presentation title *Assessing the Reliability of a Multi-class Classifier*. July 2–4, 2014. Bremen, Germany.
23. ISBIS 2012 - International Society for Business and Industrial Statistics 2012 Conference (**invited**) presentation title *Extracting Information in a Transshipment Container Terminal Data Set: an Interaction between Graphical Tools and Statistical Models*. June 17–21, 2012. Bangkok, Thailand.

ORGANIZATION OF
INVITED SESSIONS

1. Organizer of the invited session *Statistical Learning and AI for Societal Challenges* at ISBIS 2025 - International Society for Business and Industrial Statistics 2025 Conference. October 2–3, 2025. Amsterdam, The Netherlands.
2. Organizer of the invited session *ISBIS session: Methods and Applications in Machine Learning and Economic Analysis* at ENBIS 2025 - European Network for Business and Industrial Statistics. September 14–18, 2025. Piraeus, Greece.
3. Organizer of the invited session *Advances in Text Mining for Data Analysis* at CLADAG 2025 - 15th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society. September 8–10, 2025. Naples, Italy.
4. Organizer of the invited session *ISBIS session: Advancements in Data-driven Insights* at ENBIS 2024 - European Network for Business and Industrial Statistics. September 15–19, 2024. Leuven, Belgium.
5. Organizer of the invited session *Advances in supervised modeling and applications* at ECDA 2022 - European Conference on Data Analysis. September 14–16, 2022. Naples, Italy.
6. Organizer and chairman of the invited session *Advances in Statistical Modeling and Applications* at ISBIS 2022 - International Society for Business and Industrial Statistics 2022 Conference. June 20–21, 2022. Naples, Italy.
7. Organizer and chairman of the invited session *y-BIS: Recent Statistical Advances by Young Statisticians in Italy* at ISBIS 2022 - International Society for Business and Industrial Statistics 2022 Conference. June 20–21, 2022. Naples, Italy.
8. Organizer and chairman of the invited session *Advances in Statistical Modeling and Applications* at ENBIS 2021 - European Network for Business and Industrial Statistics. September 13–15, 2021. Held online.
9. Organizer and chairman of the invited session *Advances in Clustering* at CLADAG 2021 - 13th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society. September 9–11, 2021. Florence, Italy.
10. Organizer of the invited Session *IPS 13 – y-BIS Session: Advances in Statistical Learning Applications* at ISI 2021 - 63rd International Statistical Institute World Statistics Congress. July 11–16, 2021. Held online.
11. Organizer and chairman of the invited session *Classification based algorithms: methods and applications* at y-BIS 2019 - ISBIS Young Business and Industrial Statisticians Workshop on Recent Advances in Data Science and Business Analytics. September 25–28, 2019. Istanbul, Turkey.

REFeree SERVICE **Journals:** Applied Sciences, Applied Stochastic Models in Business and Industry, Computation, Computational Statistics, Computers in Human Behavior, Discover Applied Sciences, Electronics, Empirical Economics, Imaging Science Journal, Journal of the Economic Science Association, Journal of Statistical Theory and Practice, Machine Learning, Machines, Operations Research Forum, Plants, Quality & Quantity, Scientific Reports, Statistical Analysis and Data Mining, Statistical Methods and Applications, Statistics and Computing, Statistics and Public Policy, Sustainability, Textile Research Journal.

Research projects: FRA 2022 Program (Lender University of Naples Federico II, Italy), 2023 Scientific Research Funding Call: Small and Medium-Size Research Projects (Sapienza University, Italy).

TEACHING
EXPERIENCE

Lecturer

Short Specialisation's Level Courses

- TDM Urban Computing 2019
Lecture title: *Statistical Methods for Data Analysis*

Ph.D. Level Courses (at University of Cagliari, Italy)

- Statistics (8 hours, Fall 2024)
- Statistics (6 hours, Spring 2024)
- Supervised and Semi-supervised decision trees algorithms (24 hours, Spring 2022)
- Quantitative Methods (8 hours, Fall 2020)
- Quantitative Methods (8 hours, Fall 2019)
- Statistical Models for Business Analytics (12 hours, Spring 2019)
- Quantitative Methods (16 hours, Fall 2017)
- Quantitative Methods (9 hours, Fall 2016)

Master's II Level Courses (at University of Cagliari, Italy)

- Statistics and Data Analysis (Master of Digitization of the Electricity System for Energy Transition, 25 hours, Fall 2024-Spring 2025)
- Statistics and Data Analysis (Master of Digitization of the Electricity System for Energy Transition, 25 hours, Fall 2023-Spring 2024)
- Statistics and Data Analysis (Master of Digitization of the Electricity System for Energy Transition, 25 hours, Fall 2022-Spring 2023)
- Statistics (Master of European Planning, 24 hours, Fall 2022)
- Statistics (Master of European Planning, 12 hours, Spring 2020)

Master's Level Courses (at University of Cagliari, Italy)

- Statistical Methods for Data Journalism (degree in Journalism and Web Information, 30 hours, Spring 2025)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2024)
- Statistical Learning (degree in Data Science, Business Analytics and Innovation, 18 hours, Fall 2023)
- Market Analysis (degree in Managerial Economics, 36 hours, Fall 2023)
- Basis of Scientific Methodology (degree in Cellular and Molecular Biology, 32 hours, Spring 2023)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2022)
- Basis of Scientific Methodology (degree in Cellular and Molecular Biology, 32 hours, Spring 2022)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2021)
- Biostatistics (degree in Marine Bioecology, 24 hours, Fall 2020)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2020)
- Biostatistics (degree in Marine Bioecology, 24 hours, Fall 2019)

- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2019)
- Big Data Lab (degree in Data Science, Business Analytics and Innovation, 18 hours, Spring 2019)
- Biostatistics (degree in Marine Bioecology, 24 hours, Fall 2018)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2018)
- Market Analysis (degree in Managerial Economics, 54 hours, Fall 2017)
- Market Analysis (degree in Managerial Economics, 36 hours, Fall 2016)
- Market Analysis (degree in Managerial Economics, 36 hours, Fall 2015)

Undergraduate Courses (at University of Cagliari, Italy)

- Statistics (degree in Economics and Finance, 72 hours, Fall 2024/Spring 2025)
- Statistics (degree in Economics and Finance, 72 hours, Fall 2023/Spring 2024)
- Statistics (degree in Economics and Business Management online, 24 hours, Spring 2023)
- Statistics (degree in Economics and Finance, 72 hours, Fall 2022/Spring 2023)
- Statistics (degree in Economics and Business Management online, 32 hours, Spring 2022)
- Statistics (degree in Economics and Business Management, 36 hours, Spring 2018)
- Statistics (degree in Economics and Finance, 18 hours, Spring 2017)
- Statistics (degree in Economics and Finance, 18 hours, Spring 2016)

Teaching Assistant, at University of Cagliari, Italy

Responsibilities have included leading practice and computing lab sessions, holding office hours, creating lab content, and grading.

- Statistics (degree in Economics and Business Management, 72 hours, Spring 2017)
- Quantitative Methods for Management (degree in Managerial Economics, 20 hours, Spring 2017)
- Statistics (degree in Economics and Business Management, 96 hours, Spring 2016)
- Quantitative Methods for Management (degree in Managerial Economics, 20 hours, Spring 2016)
- Statistics (degree in Economics and Business Management, 80 hours, Spring 2014)
- Statistics (FOCUS course, 30 hours, Fall 2012)
- Statistics (degree in Economics and Business Management, 20 hours, Spring 2012)
- Statistics (degree in Economics and Finance, 20 hours, Spring 2012)
- Statistics (FOCUS course, 55 hours, Spring 2011)
- Informatics (Economics and Tourist Services Management, 80 hours, Fall 2010)

PROFESSIONAL
EXPERIENCE

SmartLab Srl, Cagliari, Italy

July, 2012 to present

Board Member and CEO (Chief Executive Officer) of SmartLab Srl, an academic spin-off of the University of Cagliari established in 2012 to foster technology transfer and the valorization of academic research in the fields of Business Intelligence and Data Science. Activities include the planning and supervision of applied research projects, the development of Decision Support Systems (DSS), survey-based studies, and advanced statistical models aimed at socio-economic evaluation and the design of public policies. Particular attention is devoted to bridging the gap between academia and the productive sector, through collaborations with public and private organizations operating in tourism, healthcare, agriculture, transport, and energy. The position also entails defining innovation strategies, managing institutional relations, and promoting training initiatives and scientific dissemination, with the goal of applying advanced quantitative methodologies to support decision-making and territorial development.

TECHNICAL SKILLS Computer Applications: $\text{T}_{\text{E}}\text{X}$ ($\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$, $\text{BIBT}_{\text{E}}\text{X}$), most common productivity packages (for Windows and OS X platforms)

R language, Shiny programming (for building interactive web apps)

SPSS, SPAD, XL-STAT, STATA, STATISTICA, EViews, Orange, Jamovi

Operating Systems: Microsoft Windows family and Apple OS X