

Curriculum Vitae

Joana Jorge de Queiroz Leite

Adjunct Professor at Coimbra Business School | ISCAC of the Polytechnic University of Coimbra (IPC), Portugal. Integrated member at the Centre for Organizational and Social Studies of Polytechnic of Porto (CEOS.PP). PhD in Applied Mathematics, specialization in Statistics, from the University of Coimbra. PhD thesis explores the probabilistic structure of a general time series model, the power threshold GARCH model, and the application to statistical process control. Published works are in time series analysis and control charts for time series, extending to econometric applications. Research interests are now in sequential data prediction, especially, time series forecasting, with both statistical and machine learning models, and its computational implementation.

Identification

Personal identification

Full name
Joana Jorge de Queiroz Leite

Citation names

Leite, J.

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Ciência ID
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https://www.iscac.pt/escola/recursos-humanos/docente-detail/?userid=205 (Scholar)

Knowledge fields

Exact Sciences - Mathematics - Statistics and Probability
Exact Sciences - Computer and Information Sciences - Computer Sciences

Education

	Degree	Classification
2020/09 - 2022/03 Concluded	Data Science and Engineering (Master's Degree (completion of specialization degree)) Universidade do Porto Faculdade de Engenharia, Portugal	18 (A)
2007/09 - 2013/11 Concluded	Applied Mathematics - Probability and Statistics (pre-Bologna) (Doctorate) Universidade de Coimbra, Portugal *"Processos Threshold GARCH com Potência: estrutura probabilista e aplicação a cartas de controlo"* *(THESIS/DISSERTATION)*	Aprovada c/ Distinção e Louvor
2001/09 - 2004/05 Concluded	Applied Mathematics - Probability and Statistics (pre-Bologna) (Master's Degree) Universidade de Coimbra, Portugal *"Séries Temporais Condicionalmente Heteroscedásticas - Estudo Probabilista de Modelações GARCH"* *(THESIS/DISSERTATION)*	Muito Bom
1995/09 - 2000/05 Concluded	Mathematics - Teacher Training (pre-Bologna) (Licenciate Degree) Universidade de Coimbra, Portugal	16
1996 - 1996 Concluded	Certificate de Proficiency in English (Others) University of Cambridge, United Kingdom	

Affiliation

Teaching in Higher Education

Category	Employer
Host institution/organization	

2013/11 - Current	Adjunct Teacher (Polytechnic Teacher)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2007/10 - 2013/10	Invited Assistant (Polytechnic Teacher)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2001/10 - 2007/09	Assistant (Polytechnic Teacher)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

Other Careers

	Category Host institution/organization	Employer
2000/09 - 2001/08	Primary and Secondary School Teacher (Primary and Secondary School Teacher) Escola Básica da Charneca da Caparica, Portugal	Republica Portuguesa Ministério da Educação, Portugal
1999/09 - 2000/08	Primary and Secondary School Teacher (Primary and Secondary School Teacher) Escola Secundária Jaime Cortesão, Portugal	Republica Portuguesa Ministério da Educação, Portugal

Positions / Appointments

	Category Host institution/organization	Employer
2024/10 - Current	Bachelor in Data Science for Management - Member of the Scientific Committee	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2019/12 - Current	Master in Data Analysis and Decision Support System - Member of the Scientific Committee	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

2022/10/01 - 2024/10/10	Master in Data Analysis and Decision Support System - Program Director	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/09 - 2024/09	Technical-Scientific Council - Member	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/07 - 2023/08	Bachelor in Data Science for Management - Member of the Installing Committee	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2012/12 - 2019/12	Statistics Committee - Coordinator	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2019/05 - 2019/10	Statistics Committee of IPC - Member Instituto Politécnico de Coimbra, Portugal	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2004/05 - 2009/11	Scientific Council - Member	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2007/04 - 2009/09	General Council of IPC - Member Instituto Politécnico de Coimbra, Portugal	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2006/06 - 2008/11	Pedagogical Council - Member	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

Others

Category Host institution/organization	Employer

2026/03 - Current	Integrated Member at the Research Centre for Organisational and Social Studies (CEOS.PP Coimbra) Instituto Politécnico de Coimbra, Portugal	Instituto Politécnico do Porto Centro de Estudos Organizacionais e Sociais, Portugal
2024/01 - 2026/02	Collaborator at the Research Centre for Natural Resources, Environment and Society (CERNAS) Instituto Politécnico de Coimbra, Portugal	Centro de Estudos de Recursos Naturais Ambiente e Sociedade - Pólo de Coimbra, Portugal
2023/11 - 2026/02	Collaborator at the Research Centre for Organisational and Social Studies (CEOS.PP Coimbra) Instituto Politécnico de Coimbra, Portugal	Instituto Politécnico do Porto Centro de Estudos Organizacionais e Sociais, Portugal
2014/02 - 2023/12	Integrated Member at the Research Centre for Mathematics of the University of Coimbra (CMUC) Universidade de Coimbra, Portugal	Universidade de Coimbra Centro de Matemática, Portugal
2011/10 - 2013/11	Student Member at the Research Centre for Mathematics of the University of Coimbra (CMUC) Universidade de Coimbra, Portugal	Universidade de Coimbra Centro de Matemática, Portugal

Projects

Contract

	Designation	Funders
2025/07 - Current	PortfolYou: Applying Behavioral Science and Artificial Intelligence to Personalized Investment Portfolio Planning PortfolYou CENTRO2030-FEDER-02256000 Researcher	European Regional Development Fund, Belgium Ongoing
2025/01/01 - 2029/12/31	Centro de Estudos Organizacionais e Sociais do Politécnico do Porto | Center of Organizational and Social Studies of Polytechnic of Porto UID/05422/2025 <style forecolor="#0000FF">10.54499/UID/05422/2025</style>	Fundação para a Ciência e a Tecnologia, Portugal Ongoing

	Instituto Politécnico do Porto, Portugal	
2025/01/01 - 2025/12/31	Centro de Estudos de Recursos Naturais, Ambiente e Sociedade UID/00681/2025 10.54499/UID/00681/2025 Instituto Politécnico de Castelo Branco, Portugal Centro de Investigação de Recursos Naturais Ambiente e Sociedade, Portugal Instituto Politécnico de Viseu, Portugal Instituto Politécnico de Coimbra, Portugal Instituto Politécnico de Santarém, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Ongoing
2023/11/01 - 2024/12/31	Center of Organizational and Social Studies of Polytechnic of Porto UIDB/05422/2020 10.54499/UIDB/05422/2020 Instituto Politécnico do Porto, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Concluded
2020/01/01 - 2023/12/31	Center for Mathematics, University of Coimbra UIDB/00324/2020 10.54499/UIDB/00324/2020 Universidade de Coimbra, Portugal Universidade de Coimbra Centro de Matemática, Portugal	Fundação para a Ciência e a Tecnologia, Portugal Concluded

Outputs

Publications

Book chapter

1 Neves, M.; Leite, J.; Neves, R.. "Does Technical Analysis Win?". In *Handbook of Research on New Challenges and Global Outlooks in Financial Risk Management*, 354-383. IGI Global, 2022.
10.4018/978-1-7998-8609-9.ch017

2 Leite, J.. "On the ability of the power threshold GARCH model to capture the Taylor effect". In *Contributions in Statistics and Inference - Mathematical Texts (http://www.mat.uc.pt/%7Etextos/v47)*, 37-48. Coimbra: DMUC, 2015.

3 Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "On the Finite Dimensional Laws of Threshold GARCH Processes". In *Recent Developments in Modeling and Applications in Statistics*, 237-247. Berlin, Heidelberg: Springer Berlin Heidelberg, 2012.
10.1007/978-3-642-32419-2_24

Conference abstract	1	Sousa, Sara; Correia, Elisabete; Leite, J.; Viseu, Clara. "Environmental Behavior among Higher Education Students". Paper presented in *5th World Congress on Civil, Structural, and Environmental Engineering (CSEE 2020)*, *Lisboa*, 2020. 10.11159/iceptp20.155
Conference paper	1	Veríssimo, D.; Leite, J.; Abbasi, M.. "Customer Churn Prediction in the Telecommunications Sector Using Explainable Artificial Intelligence". Paper presented in *15th International Conference on Data Science, Technology and Applications (DATA 2026)*, *Porto*, 2026. 10.5220/0014992600004091
	2	Abreu, E.; Leite, J.. "An Overview of the Opportunities and Challenges of Data Analytics in Industry 4.0: Solutions for a Data-Driven Future in SMEs". Paper presented in *International Conference on Industry Science and Computer Sciences Innovation (ISCSI 2024)*, *Vila Nova de Gaia*, 2024. 10.1016/j.procs.2025.07.017
	3	Carvalho, M.; Borges, A.; Gavina, A.; Duarte, L.; Leite, J.; Polidoro, M.; Aleixo, S.; Dias, S.. "Enhancing Dyeing Processes with Machine Learning: Strategies for Reducing Textile Non-Conformities". Paper presented in *16th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management*, 2024. 10.5220/0012992800003838
	4	Sousa, S.; Henriques, C.; Leite, J.. "Exploring the Value of the Sea: A Study of the Blue Economy in the EU and Portugal". Paper presented in *7th FEB International Scientific Conference*, *Maribor*, 2023. 10.18690/um.epf.3.2023.15
	5	Santos, J.; Leite, J.; Rodrigues, E.; Sanches, P.; Sousa, S.; Trigo, A.; Correia, E.. "Sustainability Evaluation of the Supply Chain Under the Greenpact: A Framework Proposal for the Textile Sector". Paper presented in *7th FEB International Scientific Conference*, *Maribor*, 2023. 10.18690/um.epf.3.2023.19
	6	Leite, J.; Guedes, R.; Queirós, D.. "Decomposition Heuristic for the Aircraft Sequencing Problem: Impact on Mathematical and Constraint Programming". Paper presented in *12th International Conference on Data Science, Technology and Applications*, 2023. 10.5220/0012081500003541
	7	Lopes, C.; Almeida, B.; Leite, J.; Morais, G.. "A auditoria interna e a sua influência nos relatórios de auditoria externa: evidência dos municípios portugueses". Paper presented in *XXI Internacional Congress of the Spanish Accounting and Business Administration Association (AECA)*, *Toledo*, 2021. Published
	8	Neves, E.; Leite, J.; Neves, R.. "Technical Analysis or Buy and Hold: Evidence From the Period Between Donald Trump's Campaign and the First Date for Brexit". Paper presented in *1st International Conference in Accounting and Finance Innovation: business innovation and digital transformation*, *Aveiro*, 2020. 10.34624/1R78-9P55
	9	Nunes, T.; Leite, J.; Pedrosa, I.. "Intelligent Process Automation: An Overview over the Future of Auditing". Paper presented in *15th Iberian Conference on Information Systems and Technologies (CISTI 2020)*, *Seville*, 2020. 10.23919/cisti49556.2020.9140969

	10	Leite, J.; Silva, A.. "Computing prediction intervals with CAATTs: Implementation in CaseWare IDEA and complemented in R project software". Paper presented in *13th Iberian Conference on Information Systems and Technologies (CISTI 2018)*, *Caceres*, 2018. 10.23919/CISTI.2018.8399474
	11	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "On the probabilistic structure of power TGARCH models and applications to real data". Paper presented in *3rd Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA 2014), http://www.smtda.net/images/1_G-L_SMTDA2014_Proceedings_NEW.pdf*, *Lisbon*, 2014. Published
	12	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "Propriedade de Taylor no modelo TGARCH(1,1)". Paper presented in *XXI Congress of the Portuguese Statistical Society (SPE 2013), https://www.spestatistica.pt/storage/app/uploads/public/5e3/da4/8ca/5e3da48ca1500283952397.pdf*, *Aveiro*, 2013. Published
	13	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "Asymmmetric limits in modified control charts for TGARCH model". Paper presented in *11th Annual European Network for Business and Industrial Statistics Conference (ENBIS 2011)*, *Coimbra*, 2011. Published
	14	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "Presença do efeito de Taylor em modelos ARCH com limiares". Paper presented in *XIV Congress of the Portuguese Statistical Society (SPE 2006)*, *Covilhã*, 2007. Published
	15	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "Sobre as leis marginais de processos GARCH com limiares". Paper presented in *XIV Congress of the Portuguese Statistical Society (SPE 2006)*, *Covilhã*, 2007. Published
	16	Leite, J.; Gonçalves, E.. "Modelação condicionalmente heteroscedástica e sua aplicação às cotações de fecho das ações do BCP". Paper presented in *XII Congress of the Portuguese Statistical Society (SPE 2004)*, *Évora*, 2005. Published
Conference poster	1	Leite, J.. "Revisiting a statistical approach to the pre- and post-pandemic profiling of US retail indicators". Paper presented in *3rd Edition of Researcher's Day CEOS.PP (DICEOS25)*, 2025.
	2	Canoso, J.; Leite, J.. "A Statistical Approach to Pandemic Impact Analysis: Clustering Time Series Features in the US Retail Sector". Paper presented in *XXVII Congress of the Portuguese Statistical Society (SPE 2025)*, 2025.
	3	Carvalheiro, J.; Leite, J.; Viseu, Clara. "Exploring Statistical Indices for Weekly Seasonality Analysis". Paper presented in *XXVII Congress of the Portuguese Statistical Society (SPE 2025)*, 2025.
	4	Simões, M.; Leite, J.; Paulino, A.; Pedrosa, I.. "Predicting undergraduate dropout at the Polytechnic University of Coimbra". Paper presented in *XXXII Conference on Classification and Data Analysis (JOCLAD 2025)*, 2025.

5 Ferreira, D.; Leite, J.; Sousa, S.. "Digitalization of the Sea in Portugal: A Proposal for a Business Intelligence Solution with Open Data". Paper presented in *Innovations for the Blue Planet*, 2024.

6 Sousa, S.; Correia, E.; Viseu, C.; Leite, J.. "Estudantes do Ensino Superior e Proteção Ambiental: O Caso de uma Instituição de Ensino Superior em Portugal". Paper presented in *10.ª Conferência do Fórum da Gestão do Ensino Superior nos Países e Regiões de Língua Portuguesa (FORGES)*, 2020.

7 Cruz, R.; Leite, J.; Viseu, C.; Silva, G.. "Determinantes da performance das empresas portuguesas do setor dos vinhos: um estudo empírico". Paper presented in *II International Forum on Management*, 2018.

8 Cruz, R.; Viseu, C.; Leite, J.; Silva, G.. "A perceção da qualidade e a sua influência na performance das empresas vitivinícolas portuguesas". Paper presented in *XXIII Congress of the Portuguese Statistical Society (SPE 2017)*, 2017.

9 Leite, J.; Gonçalves, E.; Mendes-Lopes, N.. "Cartas de controlo Shewhart modificadas para para processos delta TGARCH com limites simétricos e assimétricos". Paper presented in *XXII Congress of the Portuguese Statistical Society (SPE 2015)*, 2015.

Journal article

1 Coutinho, F.; Leite, J.. "Municipal Profiles of Voter Turnout: Evidence from the 2002, 2011 and 2022 Portuguese Legislative Elections". *Coimbra Business Review* 1 (5) (2026): 33-45.

In press

2 Vicente, M.I.; Leite, J.. "Forecasting Medicines Sales in a Community Pharmacy: A Comparative Study of Statistical Methods". *Coimbra Business Review* 1 (5) (2026): 46-58.

In press

3 Simões, M.; Leite, J.; Paulino , A.; Pedrosa, I.. "Predicting Dropout in a Portuguese Higher Education Institution Using Interpretable Machine Learning Models". *Coimbra Business Review* 1 (5) (2026): 74-86.

In press

4 Ferreira, D.; Leite, J.; Sousa, S.. "Uma Proposta de Business Intelligence com Dados Abertos para o Mar Português [A Business Intelligence Proposal with Open Data for the Portuguese Sea].". *European Public & Social Innovation Review* 9 (2024): 1-17. https://epsir.net/index.php/epsir/article/view/507/433.

10.31637/epsir-2024-507

5 Lopes, C.; Almeida, B.; Leite, J.; Morais, M.. "The influence of internal audit departments on external municipal audit reports". *Journal of Public Budgeting, Accounting & Financial Management* 35 5 (2023): 644-666. http://dx.doi.org/10.1108/jpbafm-11-2022-0166.

10.1108/jpbafm-11-2022-0166

6 Costa, B.; Leite, J.. "Correlation and Prediction for the Portuguese Tourism Sector Leveraged by Google Trends Data". *Procedia Computer Science* 204 (2022): 690-697. https://doi.org/10.1016/j.procs.2022.08.083.

10.1016/j.procs.2022.08.083

	7	Correia, E.; Sousa, S.; Viseu, C.; Leite, J.. "Using the theory of planned behavior to understand the students' pro-environmental behavior: a case-study in a Portuguese HEI". *International Journal of Sustainability in Higher Education* 23 5 (2021): 1070-1089. http://dx.doi.org/10.1108/ijshe-05-2021-0201. 10.1108/ijshe-05-2021-0201
	8	Neves, E.; Oliveira, V.; Leite, J.; Henriques, C.. "The global business cycle and speculative demand for crude oil". *China Finance Review International* 11 4 (2021): 502-521. http://dx.doi.org/10.1108/cfri-05-2021-0091. 10.1108/cfri-05-2021-0091
	9	Sousa, S.; Correia, E.; Leite, J.; Viseu, C.. "Environmental knowledge, attitudes and behavior of higher education students: a case study in Portugal". *International Research in Geographical and Environmental Education* 30 4 (2020): 348-365. http://dx.doi.org/10.1080/10382046.2020.1838122. 10.1080/10382046.2020.1838122
	10	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "On the Distribution Estimation of Power Threshold Garch Processes". *Journal of Time Series Analysis* 37 5 (2016): 579-602. http://dx.doi.org/10.1111/jtsa.12173. 10.1111/jtsa.12173
	11	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "On the probabilistic structure of power threshold generalized arch stochastic processes". *Statistics & Probability Letters* 82 8 (2012): 1597-1609. http://dx.doi.org/10.1016/j.spl.2012.04.014. 10.1016/j.spl.2012.04.014
	12	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "The ARL of modified Shewhart control charts for conditionally heteroskedastic models". *Statistical Papers* 54 1 (2011): 1-19. http://dx.doi.org/10.1007/s00362-011-0408-z. 10.1007/s00362-011-0408-z
	13	Gonçalves, E.; Leite, J.; Mendes-Lopes, N.. "A mathematical approach to detect the Taylor property in TARCH processes". *Statistics & Probability Letters* 79 5 (2009): 602-610. http://dx.doi.org/10.1016/j.spl.2008.10.006. 10.1016/j.spl.2008.10.006
Journal issue	1	Leite, J.; Lopes, A.P.. "Coimbra Business Review | Número Especial 5". *Coimbra Business Review* 1 (5) (2026): In press • Editor
Magazine article	1	Canova, F.; Larguinho, M.; Leite, J.; Martins, F.; Rocha, C.; Santos, C.; Silva, A.; Toste, M.; Viseu, C.. "A Estatística no Instituto Politécnico de Coimbra", Bulletin of the Portuguese Statistical Society, 2012, https://www.spestatistica.pt/storage/app/uploads/public/5e3/dad/b81/5e3dadb81058f775180638.pdf.

Activities

Oral presentation

	Presentation title	Event name Host (Event location)
2026/09/22	Qualidade Preditiva na Indústria Automóvel: Uma Abordagem Estatística e de Aprendizagem Automática Explicável Rumo ao Desperdício Zero	Ciência em Palco | Jornadas Científicas do IPC Polytechnic University of Coimbra (Coimbra, Portugal)
2026/07/16	Customer Churn Prediction in the Telecommunications Sector Using Explainable Artificial Intelligence	15th International Conference on Data Science, Technology and Applications (DATA 2026) Institute for Systems and Technologies of Information, Control and Communication (INSTICC) (Porto, Portugal)
2026/06/03	A Strategic Data Science Approach to Identifying Defect-Influencing Variables in Automotive Pressing Processes	Business & Data Analytics Conference 2026 (BizData 2026) (Lisboa, Portugal)
2026/04/17	Peeking Early, Concluding Wrong? Statistical Risks of Peeking in A/B Testing	IDEEA'26 – Research, Development, Experience and Academic Exploration Coimbra Business School (Coimbra, Portugal)
2025/04/04	Time series features and forecasting of community pharmacy sales	XXXII Conference on Classification and Data Analysis (JOCLAD 2025) Associação Portuguesa de Classificação e Análise de Dados (CLAD) (Porto, Portugal)
2025/04/03	Exploring voter turnout in Portuguese legislative elections through municipal profiling	XXXII Conference on Classification and Data Analysis (JOCLAD 2025) Associação Portuguesa de Classificação e Análise de Dados (CLAD) (Porto, Portugal)
2024/11/18	Enhancing Dyeing Processes with Machine Learning: Strategies for Reducing Textile Non-Conformities	16th International Conference on Knowledge Discovery and Information Retrieval (KDIR 2024) Institute for Systems and Technologies of Information, Control and Communication (INSTICC) (Porto, Portugal)
2024/10/30	An Overview of the Opportunities and Challenges of Data Analytics in Industrial Management	International Conference on Industry Science and Computer Sciences Innovation (ISCSI 2024) AIS Affiliated Conference (Porto, Portugal)
2024/10/18	Business intelligence com dados abertos: uma proposta para o mar português	XIV Congreso Universitario Internacional de Comunicación, Innovación, Investigación y Docencia (CUICIID 2024)

2023/07/13	Decomposition Heuristic for the Aircraft Sequencing Problem: Impact on Mathematical and Constraint Programming	12th International Conference on Data Science, Technology and Applications (DATA 2023) Institute for Systems and Technologies of Information, Control and Communication (INSTICC) (Rome, Italy)
2023/05/16	Exploring the Value of the Sea: A Study of the Blue Economy in the EU and Portugal	7th FEB International Scientific Conference »Strengthening resilience by the sustainable economy and business - towards the SDGs« Faculty of Economics and Business of the University of Maribor (Maribor, Slovenia)
2023/05/16	Sustainability Evaluation of the Supply Chain Under the Greenpact: A Framework Proposal for the Textile Sector	7th FEB International Scientific Conference »Strengthening resilience by the sustainable economy and business - towards the SDGs« Faculty of Economics and Business of the University of Maribor (Maribor, Slovenia)
2022/03/11	Correlation and Prediction for the Portuguese Tourism Sector Leveraged by Google Trends Data	International Conference on Industry Science and Computer Sciences Innovation (ISCSI 2022) AIS Affiliated Conference (Vila Nova de Gaia, Portugal)
2021/09/23	A auditoria interna e a sua influência nos relatórios de auditoria externa: evidência dos municípios portugueses	XXI Internacional Congress of (AECA) Spanish Accounting and Business Administration Association (AECA) (Toledo, Spain)
2021/02/24	Using the Theory of Planned Behavior to Explain Higher Education Students' Pro-environmental Behavior	Seventeenth International Conference on Environmental, Cultural, Economic & Social Sustainability Vrije University (Amesterdam, Netherlands)
2020/11/12	Technical Analysis or Buy and Hold: Evidence From the Period Between Donald Trump's Campaign and the First Date for Brexit	International Conference on Accounting and Finance Innovation (ICAFI 2020) Universidade de Aveiro (Aveiro, Portugal)
2020/10/19	Environmental Behavior among Higher Education Students	5th World Congress on Civil, Structural, and Environmental Engineering (CSEE 2020) International Academy of Science, Engineering, and Technology (International ASET Inc.) (Lisboa, Portugal)

2020/06/26	Intelligent Process Automation: An Overview over the Future of Auditing	15th Iberian Conference on Information Systems and Technologies (CISTI 2020) Iberian Association of Information Systems and Technologies (AISTI) (Sevilha, Spain)
2019/01/31	O Desempenho dos ETFS por Setor dos EUA	XXIX Hispano-Lusas Conference on Scientific Management University School of Osuna (Osuna, Spain)
2019/01/31	Os Determinantes da Rentabilidade Bancária nos PIIG's	XXIX Hispano-Lusas Conference on Scientific Management University School of Osuna (Osuna, Spain)
2018/12/15	On the computation of discrete mixtures of continuous distributions: Theoretical stability of algorithms	11th International Conference of the ERCIM WG on Computational and Methodological Statistics and 12th International Conference on Computational and Financial Econometrics (CFE-CMStatistics 2018) CMStatistics (Pisa, Italy)
2018/11/23	On the computation of discrete mixtures of continuous probability distributions	BRU-IUL Research Seminars Business Research Unit of the Instituto Universitário de Lisboa (BRU-IUL) (Lisboa, Portugal)
2018/07/03	Incorporating speculative demand in the global market model for crude oil using oil futures spread	10th Portuguese Network Conference (PNF 2018) ISCTE-Instituto Universitário de Lisboa (Lisboa, Portugal)
2018/06/16	Computing prediction intervals with CAATTs: Implementation in CaseWare IDEA and complemented in R project software	13th Iberian Conference on Information Systems and Technologies (CISTI 2018) Iberian Association of Information Systems and Technologies (AISTI) (Cáceres, Spain)
2017/12/18	Computation of three discrete distribution mixtures of continuous distributions: stability analysis	11th International Conference on Computational and Financial Econometrics and 10th International Conference of the ERCIM WG on Computational and Methodological Statistics (CFE-CMStatistics 2017) CMStatistics (Lodres, United Kingdom)
2017/10/21	Cálculo computacional de misturas discretas de distribuições contínuas: revisão do método de Benton e Krishnamoorthy	XXIII Congress of the Portuguese Statistical Society (SPE 2017) Portuguese Statistical Society (SPE) (Lisboa, Portugal)

2017/01/27	Studies on Power-TGARCH and CP-INGARCH time series	3rd CMUC Workshop Centre for Mathematics of the University of Coimbra (CMUC) (Coimbra, Portugal)
2015/07/02	On the modified Shewhart control chart for d-TGARCH processes	16th Conference of the Applied Stochastic Models and Data Analysis (ASMDA 2015) (Piraeus, Greece)
2014/07/03	Can power threshold GARCH models capture the Taylor effect?	11th International Vilnius Conference on Probability Theory and Mathematical Statistics (IVC 2014) University of Vilnius (Vilnius, Lithuania)
2014/06/14	On the probabilistic structure of power TGARCH models and applications to real data	Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA 2014) (Lisboa, Portugal)
2014/05/28	Taylor property in a class of conditionally heteroscedastic models	CIDMA Research Seminars Center for Research & Development in Mathematics and Applications (CIDMA) (Aveiro, Portugal)
2014/03/28	Taylor property revisited	CMUC Research Seminars Centre for Mathematics of the University of Coimbra (CMUC) (Coimbra, Portugal)
2013/12/01	SPE2013 – XXI Congress of the Portuguese Statistical Society	XXI Congress of the Portuguese Statistical Society (SPE 2013) Portuguese Statistical Society (SPE) (Aveiro, Portugal)

Supervision

	Thesis Title Role	Degree Subject (Type) Institution / Organization
2025/09/01 - 2026/10/16	Explainable Machine Learning for Telecommunications Customer Churn Prediction: A Comparative Study Across Two Public Datasets Co-supervisor of David João Ferreira Veríssimo	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2024/09/01 - 2025/12/16	Impact of COVID-19 on Retail in the United States: Comparison by Cluster Analysis for Time Series Supervisor of José Pedro Alexandre Canoso	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

2024/09/01 - 2025/12/15	Peeking in A/B tests: state of the art and simulation studies Co-supervisor of Joana Morais Sarmento Batista Romão	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/10/01 - 2025/12/12	Prediction of Remaining Useful Life for Predictive Maintenance of Electric Vehicles Batteries: A Contribution with Benchmark Datasets Supervisor of Ibraimo Mamudo Osmane Alegy	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2024/09/01 - 2025/12/04	Convolutional neural networks for tyre wear prediction Co-supervisor of Mariana Oliveira de Sousa	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2024/09/01 - 2025/09/26	Measuring Weekly Seasonality in Bicycle Mobility: Methodological Proposal and Application to Bicycle Counter Data in Lisbon Supervisor of Joana de Jesus Carvalheiro	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/10/01 - 2024/12/11	A data governance framework and a roadmap for practical implementation Co-supervisor of Carolina Djovana da Silveira Freire	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/10/01 - 2024/12/11	Business Intelligence Applied to SMEs: Standard Management Support Solution Supervisor of Alexandre Reis Martins	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/10/01 - 2024/12/06	Predictive Maintenance for Industrial Machines: Development of Machine Learning Models in Python Supervisor of Fernando Manuel Santos Almeida	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/10/01 - 2024/12/06	Dashboard development for fluctuations analysis in production lines at Bosch Car Multimedia, S.A. Supervisor of Francisco Manuel Moreira Melo	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/10/01 - 2024/12/02	Semantic Models Development: Business Intelligence at Zeone Consulting Supervisor of Ana Beatriz Oliveira	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e

	Gaspar	Administração de Coimbra, Portugal
2023/10/01 - 2024/10/02	Development of Tools to Support the Operational Management of Medical Equipment Repair Operations Supervisor of Eliana Peixoto Abreu	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/09/15 - 2024/07/25	Gender equality and the illegality of dismissal Co-supervisor of Inês Maio Teixeira	Solicitadoria (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/01/18 - 2024/06/03	Electoral Participation: a cluster analysis approach to the legislative elections of 2002, 2011, and 2022 in Portugal Supervisor of Fábio André Cravinho Coutinho	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/01/18 - 2024/06/03	Sales Forecasting in Pharmaceutical Retail: Case Study Supervisor of Maria Inês Vicente Almeida	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023/02/21 - 2023/12/14	Predictive factors for school dropout among IPC students: School dropout mitigation Co-supervisor of Marta Sofia Morgado Simões	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/11/30 - 2023/12/13	The Sea as a Vector of Affirmation Geopolitics and Economics of Portugal: An Analysis of Business Intelligence with Open Data Supervisor of Daniela Félix Ferreira	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2020/01/07 - 2022/10/25	Artificial Intelligence and Robotic Process Automation in Audit Co-supervisor of Tiago Alexandre de Freitas Nunes	Auditoria Empresarial e Pública (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2020/10/01 - 2021/11/25	Automatic Forecast Evaluation Tool Supervisor of Filipe Nuno de Moura Rocha Rigueira	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2020/10/01 - 2021/11/24	Descriptive and predictive analyses for the Portuguese tourism sector Supervisor of Bianca Sales Da Costa	Análise de Dados e Sistemas de Apoio à Decisão (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e

		Administração de Coimbra, Portugal
2018/10/01 - 2020/11/26	Internal audit and its influence on external audit reports: evidence from Portuguese municipalities Co-supervisor of Catarina Isabel dos Santos Lopes	Auditoria Empresarial e Pública (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2018/10/01 - 2019/12/12	Technical analysis or buy and hold Co-supervisor of Renato José Tomás Neves	Análise Financeira (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2016/10/01 - 2017/12/14	Does Speculation Affect Oil Price Volatility? Co-supervisor of Vítor Hugo Alves Oliveira	Análise Financeira (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2015/10/01 - 2017/12/13	Balanced Scorecard in SMEs: Case study at the company Go Outdoor Supervisor of Nuno Alexandre Pires Henriques	Gestão Empresarial (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2015/10/01 - 2017/12/12	The perception of quality and its influence on the performance of Portuguese companies in the wine sector Co-supervisor of Rafael Marques da Cruz	Gestão Empresarial (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

Event organisation

	Event name Type of event (Role)	Institution / Organization
2024/05/22 - 2024/07/12	The Erasmus+ Blended Intensive Program (BIP) "Global Data Analytics Immersion: Theory and Practice for Tomorrow's Decision-Makers" offered a hands-on course in data analytics and Python programming. It combined virtual sessions in May and June with an in-person phase in Coimbra, Portugal, in July. Open to undergraduate and master's students, it used project-based learning to build skills in Data Quality, Ethics, Analysis, Visualization, Python programming, and Decision Making, and included a Job Shadowing experience to bridge theory with real-world (2024/05/22 - 2024/07/12) Workshop (Co-organiser)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

Event participation

	Activity description Type of event	Event name Institution / Organization
2023/07/03 - 2023/07/07	Study Groups are intensive week-long, team-based, problem-solving workshops that provide a unique opportunity for collaboration between mathematicians, scientists, and industrialists. Workshop	174th European Study Group with Industry (ESGI 174) PT-MATHS-IN (Rede Portuguesa de Matemática para a Indústria e Inovação), Portugal ECMI (European Consortium for Mathematics in Industry), United Kingdom Instituto Politecnico do Porto Escola Superior de Tecnologia e Gestão, Portugal

Jury of academic degree

	Theme Role	Candidate name (Type of degree) Institution / Organization
2026/07/09	Prediction of Failures in Polymer Injection Moulding Machines Project (Thesis) Main arguer	Willian Pegorin (Master) Universidade de Aveiro, Portugal
2025/12/18	Food Consumption in the European Union: Trends in Recent Years and Future Perspectives (Thesis) Main arguer	Francisco Luís Martins Cotrim (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2025/12/11	Automation of data catalogues: a systematic review of the literature (Thesis) Main arguer	António Pedro Barbêdo Nanita (Master) ISCTE-Instituto Universitário de Lisboa, Portugal
2025/07/17	Fraud Prediction and Ransomware Detection in Bitcoin Using Deep Learning on Time Series Data (Thesis) Main arguer	Mariana Teixeira Ferreira (Master) Universidade de Aveiro, Portugal
2023/12/07	Modelo de Previsão de Preços de Abertura do Mercado Financeiro: Caso Português PSI (Thesis) Main arguer	Vanessa Maria Almeida Loureiro (Master) Universidade de Aveiro, Portugal
2023/09/22	Advanced analytical methods for fraud detection: a systematic literature review (Thesis) Main arguer	Marta Sequeira Rego Fernandes (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022/07/07	Testes e Análise de Usabilidade no Desenvolvimento de um Novo Produto (Thesis) Main arguer	Diogo Moreira Fernandes (Master) Instituto Politécnico de Coimbra Instituto Superior de Engenharia de Coimbra, Portugal

2021/02/16	Analisando o desempenho na aquisição de parceiros de negócios via redes sociais por uma startup de tecnologia (Thesis) Main arguer	Júlio Villar Ornellas (Master) Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal

Association member

	Society Organization	Role
2002 - Current	Portuguese Statistical Society (SPE)	Member
2024 - 2025	International Institute of Forecasters (IIF)	Member
1997 - 2021	Portuguese Mathematical Society (SPM)	Member
2017 - 2019	International Society for Business and Industrial Statistics (ISBIS)	Member
2016 - 2018	Portuguese Association for Classification and Data Analysis (CLAD)	Member

Committee member

	Activity description Role	Institution / Organization
2022 - Current	Scientific Committee of the Data Science and Analytics for Decision Support Workshop @ International Conference On Industry Sciences and Computer Sciences Innovation (ISCSI) Member	
2020 - Current	Scientific Committee of the Iberian Conference on Information Systems and Technologies (CISTI) Member	
2019 - Current	Program Committee of the Workshop on Special Interest Group on ICT for Auditing & Accounting (WICTA) @ World Conference on Information Systems and Technologies (World CIST) / Iberian Conference on Information Systems and Technologies (CISTI) Member	
2023 - 2023	Scientific Comittee of the Special Session on Machine Learning applied to Marketing @ International Conference on Marketing and Technologies (ICMarkTech)	

Member

Course / Discipline taught

	Academic session	Degree Subject (Type)	Institution / Organization
2022 - 2024	Projeto | Project	Análise de Dados e Sistemas de Apoio à Decisão (Master's Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2014 - 2020	Métodos de Previsão Aplicados à Auditoria | Forecasting Methods Applied to Auditing	Auditoria Empresarial e Pública (Master's Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2023 - Current	Análise de Dados | Data Analytics	Ciência de Dados para a Gestão (Licenciate Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2022 - Current	Complementos de Estatística para Ciências de Dados | Statistics Complements for Data Science	Análise de Dados e Sistemas de Apoio à Decisão (Master's Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2017 - Current	Métodos de Previsão Aplicados | Applied Forecasting	Análise de Dados e Sistemas de Apoio à Decisão (Master's Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2015 - Current	Tópicos de Matemática e Estatística | Topics of Mathematics and Statistics	Solicitadoria e Administração (Licenciate Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2013 - Current	Métodos de Previsão | Forecasting Methods	LCA, LCGP, LGE, LMNI (Licenciate Degree)	Instituto Politécnico de Coimbra Instituto Superior de Contabilidade e Administração de Coimbra, Portugal
2013 - Current	Estatística Aplicada às Ciências Empresariais | Statistics	LSDA, LFC (Licenciate Degree)	Instituto Politécnico de Coimbra, Portugal

Applied to Business Sciences

Other jury / evaluation

	Activity description	Institution / Organization
2026/04/08 - 2036/05/31	Member of the selection jury for the award of a research fellowship (ref. PRBI/14/2026) under the project "NIZO – FinTech: AI-Driven Personal Financial Planning System (AI-PFPS)", Polytechnic Institute of Coimbra. The evaluation comprised curricular assessment (70%) and interviews (30%) of candidates in the areas of Artificial Intelligence, Machine Learning, and Data Analysis.	Instituto Politécnico de Coimbra, Portugal

Distinctions

Award

2020	Best Paper Award - 5th World Congress on Civil, Structural, and Environmental Engineering (CSEE 2020)
2018	Best Poster Award - II International Forum on Management Universidade do Algarve, Portugal Escola Superior de Hotelaria e Turismo do Estoril, Portugal Universidade Aberta, Portugal