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Associate Researcher

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[Information Systems]



Contacts

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Curriculum

Elizabeth Fernandes has developed her career in Data Science and Machine Learning after finishing the Applied Mathematics degree in 2005. Since then, Elizabeth has been working in companies and teaching at the Polytechnic University.

Currently, Elizabeth is Guest Adjunct Professor on a 20% part-time basis at the Polytechnic of Viana do Castelo (IPVC) where she teaches Data Analysis and Mathematics in the Logistics and Marketing degrees.

Since 2017, Elizabeth has split her time between the following areas of work:

scientific research and Phd studies where she developed a Data Science framework to increase customer loyalty and conversion rates in an online business.

teaching at IPVC data analysis and artificial intelligence courses.

mentoring data projects, for example, the "Audience Analytics Accelerator LATAM program" of the International News Media Association within the scope of the Facebook Journalism Project, where she worked with newspapers in Brazil to apply artificial intelligence for retention and churn modeling.

continuous learning, for example, by obtaining the Certification in Data Strategy and Data Governance from the Instituto de Empresa in Madrid.

Elizabeth worked at Jornal Público (2017-2022) as Head of Analytics and Audience Insights. From September 2022 to May 2025, Elizabeth was responsible for creating the Reporting & Analytics team at Kantar Business Services. Currently, Elizabeth collaborates on the development and implementation of Data Strategies where she applies a methodology for which she is certified by the business school Instituto de Empresa (IE) of Madrid.

Research Interests:

Application of Data Science and Machine Learning in open data and companies data for Decision Support and Value generation in organizations.

Development of Data Strategies and Data Governance frameworks implementation to empower Value-Driven culture in

organizations. Leverage AI taking into account People, Processes, Technology , and Culture.

Application domains: Media and Publishers, Marketing, Hospitality, Industry, and Retail.
Elizabeth's academic background includes a B.Sc. in Applied Mathematics (Faculty of Sciences, university of Porto), a M.Sc. in Data Analysis and Decision Support Systems (Faculty of Economics, University of Porto), and a Ph.D. in Information Science and Technology (ISCTE-IUL).

Research Interests
Data Mining
Artificial Intelligence
Data Science and Digital Journalism
Data strategy
Data Literacy

Academic Qualifications			
University/Institution	Type	Degree	Period
ISCTE-Instituto Universitario de Lisboa	PhD	Information Science and Technology	2023
Instituto de Empresa de Madrid	Other type of qualification	CERTGED - Certificação em Estratégia de Dados e Data Governance	2021
INDEG-ISCTE	Other type of qualification	Applied Business Analytics	2015
Universidade do Porto - Faculdade de Economia	M.Sc.	Análise de Dados e Sistemas de Apoio à Decisão	2008
FEUP	Post-graduation	Estatística Aplicada e Modelação	2007
Universidade do Porto - Faculdade de Ciências	Licenciate	Matemática Aplicada	2005

External Professional Activities			
Period	Employer	Country	Description
2022 - 2025	Kantar Business Services	Portugal	
2017 - 2022	Jornal Público Comunicação Social S.A.	Portugal	

Supervisions

• M.Sc. Traineeship Reports

- Concluded

	Student Name	Title/Topic	Language	Institution	Concluding Year
1	Maria Inês Ramos Velho	Modelling Patterns of Subscription Propensity of online Newspapers	English	Iscte	2023

• M.Sc. Final Projects

- Concluded

	Student Name	Title/Topic	Language	Institution	Concluding Year
1	Lúcia Madeira Belchior	Churn Prediction in Online Newspaper Subscriptions	English	Nova IMS	2023

Total Citations

Web of Science®	70
Scopus	71

Publications

• Scientific Journals

- Scientific journal paper

1	<p>Belchior, L. M., António, N. & Fernandes, E. (2024). Online newspaper subscriptions: Using machine learning to reduce and understand customer churn. Journal of Media Business Studies. 21 (4), 364-387</p> <p>- Times Cited Web of Science®: 2</p> <p>- Times Cited Scopus: 1</p> <p>- Times Cited Google Scholar: 6</p>
2	<p>Fernandes, E., Moro, S. & Cortez, P. (2024). A data-driven approach to improve online consumer subscriptions by combining data visualization and machine learning methods. International Journal of Consumer Studies. 48 (2)</p> <p>- Times Cited Web of Science®: 6</p> <p>- Times Cited Scopus: 6</p> <p>- Times Cited Google Scholar: 12</p>
3	<p>Fernandes, E., Moro, S., Cortez, P., Batista, F. & Ribeiro, R. (2021). A data-driven approach to measure restaurant performance by combining online reviews with historical sales data. International Journal of Hospitality Management. 94</p> <p>- Times Cited Web of Science®: 35</p> <p>- Times Cited Scopus: 38</p> <p>- Times Cited Google Scholar: 70</p>

- Review article

1	<p>Fernandes, E., Moro, S. & Cortez, P. (2023). Data science, machine learning and big data in digital journalism: A survey of state-of-the-art, challenges and opportunities. Expert Systems with Applications. 221</p> <ul style="list-style-type: none"> - Times Cited Web of Science®: 24 - Times Cited Scopus: 23 - Times Cited Google Scholar: 50
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• Conferences/Workshops and Talks

- Publication in conference proceedings

1	<p>Fernandes, E., Moro, S. & Cortez, P. (2024). Towards a news recommendation system to increase reader engagement through newsletter content personalization. In Maria Manuela Cruz-Cunha, Dulce Domingos, Emanuel Peres, Rui Rijo (Ed.), Procedia Computer Science. (pp. 217-225). Porto: Elsevier BV.</p> <ul style="list-style-type: none"> - Times Cited Web of Science®: 2 - Times Cited Scopus: 3 - Times Cited Google Scholar: 4
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- Talk

1	<p>Fernandes, E., Alípio Jorge & Rui M. M. Brito (2008). A Knowledge Discovery Method for the Characterization of Protein Unfolding Processes. International Workshop on Practical Applications of Computational Biology and Bioinformatics IWPACBB 2008.</p> <ul style="list-style-type: none"> - Times Cited Web of Science®: 1 - Times Cited Google Scholar: 1
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Diffusion Activities

Activity Type	Event Title	Activity Description	Year
Talk/Conference in public diffusion event	DES Digital Enterprise Show of Málaga - CDO Summit	Navigating the Data Regulatory Maze: Seizing Opportunities	2024
Talk/Conference in public diffusion event	CENTERIS Conference on ENTERprise Information	Towards a News Recommendation System to increase Reader Engagement through Newsletter Content Personalization	2023
Coordination of knowledge diffusion event	CDAO Europe - Amesterdam	How Can You Leverage Data & Analytics to Develop a 360-View of the Customer and Accelerate CX Strategy?	2022
Coordination of knowledge diffusion event	Virtual LATAM Summit International News Media Association (INMA)	The adoption of the data in a media company	2021
Talk/Conference in public diffusion event	Product and Data for Media Summit da International News Media Association (INMA)	Digital Transformation Roadmap	2021