Jose L. Salmeron

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EMPLOYMENT

- [Winter 2022-] Full Professor of Computer Science and Artificial Intelligence, Dept. of Quantitative Methods, CUNEF Universidad, Madrid, Spain.
- [Spring 2022] Spanish Banking Association Visiting Professor of Artificial Intelligence, CUNEF Universidad, Madrid, Spain.
- [Spring 2012-Spring 2022] (leave of absence) Full Professor of Data Science, University Pablo de Olavide, Seville, Spain.
- [Spring 2015-Summer 2019] Research Professor of Artificial Intelligence, University Hradec Králové, Czech Republic
- [2003-2011] Associate Professor (tenured) of Information Systems, University Pablo de Olavide, Seville, Spain.
- [Fall 2001] Visiting Scientist, Department of Information Systems and Quantitative Sciences, USA. Texas Tech University, Lubbock, TX, USA.

EDUCATION

- [2014] PhD in Artificial Intelligence, Summa Cum Laude, Universidad de Almería (Spain). Dissertation: Modelling Complex Adaptive Systems with Fuzzy Cognitive Maps
- [2000] PhD in Management Information Systems, Summa Cum Laude, Universidad of Huelva (Spain). Dissertation: A systemic approach of Executive Information Systems
- [2008] Master of Computer Science. Universitat Oberta de Catalunya (Spain), Final project: Discrete-event simulation with asymmetric process (Honours award)
- [1994] Master of Business Administration. Universidad de Huelva (Spain)

FIELDS OF INTEREST

Distributed Artificial Intelligence, eXplainable Artificial Intelligence, Reservoir Computing, Quantum Computing, Causal Machine Learning, and Federated Learning.

PUBLICATIONS (selected)

- G. Napoles, J.L. Salmeron and Y. Salgueiro (2025). Inverse simulation learning of Quasi-Nonlinear Fuzzy Cognitive Maps. Neurocomputing, 650, 130864
- J.L. Salmeron and I. Arevalo (2025). Concurrent Vertical and Horizontal Federated Learning with Fuzzy Cognitive Maps. Future Generation Computer Systems 162, 107482
- J.L. Salmeron and I. Arevalo (2024). Blind Federated Learning without initial model. Journal of Big Data 11 (56), pp. 1-31.
- I. Arevalo and J.L. Salmeron (2024). A chaotic maps-based privacy-preserving distributed deep learning for incomplete and Non-IID datasets. IEEE Transactions on Emerging Topics in Computing 12(1), 357-367
- G. Napoles, J.L. Salmeron and K. Vanhoof (2021). Construction and Supervised Learning of Long-Term Grey Cognitive Networks. IEEE Transactions on Cybernetics 51(2), pp. 686-695.
- F. Vanhoenshoven, G. Napoles, W. Froelich, J.L. Salmeron and K. Vanhoof (2020). Pseudoinverse Learning of Fuzzy Cognitive Maps for Multivariate Time Series Forecasting. Applied Soft Computing 95, 106461.

SELECTED ACADEMIC HONOURS AND GRANTS

- Cardiovascular Risk Detection among Women using Digital Twins. Funded by New Frontiers in Research Fund - Exploration. Canada Government (Budget: $250.000). (2024-2026). PI: Samira A. Rahimi
- Distributed Artificial Intelligence for early diagnosis and treatment of diseases with high prevalence in aging. Funded by Next Generation EU (Budget: 15.308.971 €). Capgemini Engineering (2022-2024). PI: Jose L. Salmeron
- [COVIDSION] Federated and Explainable Multipurpose Artificial Intelligence for fast response to pandemics. Funded by Centre for the Development of Industrial Technology (Ministry of Science and Innovation, Spanish Government) (Budget: 1.250.000 €). Capgemini Engineering (2020-2021). PI: Jose L. Salmeron
- Top 2% scientist worldwide. He is included in the Stanford list of the world's top 2% scientists since the first version.
- Six-year research award 1997-2002, 2003-2008, 2009-2014, and 2015-2020, Spanish Ministry of Science and Technology

SELECTED PRESENTATIONS
CONFERENCES

- I. Arevalo, J. L. Salmeron and I. de la Oliva. Privacy-preserving Secure Distributed Computer Vision for Malaria Cells Detection, The 2nd IEEE International Conference on Federated Learning Technologies and Applications (FLTA24) 2024, Valencia.
- I. Arevalo, J. L. Salmeron and I. Romero. Privacy-preserving distributed learning with chaotic maps, IEEE International Conference on Evolving and Adaptive Intelligent Systems 2024 (IEEE EAIS 2024), May 23 - 25, 2024, Madrid (Spain)