Roi Naveiro

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EMPLOYMENT

2022–Present: Assistant Professor on Tenure Track, Dept. of Quantitative Methods, CUNEF Universidad, Madrid.

2020–2022: Postdoctoral Fellow. Institute of Mathematical Sciences from the Spanish Research Council (ICMAT-CSIC).

2016-2020: PhD Student. ICMAT-CSIC.

2015: Research Assistant. Astrophysical Institute of the Canary Islands, Tenerife, Canary Islands, Spain.

2014–2015: Undergraduate Research Assistant. Institute of Fundamental Physics and Mathematics, Universidad de Salamanca, Spain.

EDUCATION

2016–2020: PhD in Statistics and Operations Research. ICMAT-CSIC and Universidad Complutense de Madrid, Spain.

2015–2016. Master's Degree in Theoretical Physics. Universidad Complutense de Madrid, Spain.

2011–2015: Bachelor's degree in physics. Universidad de Salamanca, Spain.

FIELDS OF INTEREST

Bayesian Analysis, Adversarial Machine Learning, Machine Learning applications.

PUBLICATIONS

García-Arce, Pablo, Naveiro, Roi, and Ríos Insua, David. "Evasion Attacks Against Bayesian Predictive Models". *Conference on Uncertainty in Artificial Intelligence (UAI)*, 2025.

Carreau, Matthieu, Naveiro, Roi, and Caballero N., William. "Poisoning Bayesian Inference via Data Deletion and Replication". *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2025.

Gallego, Víctor, Naveiro, Roi, Ríos Insua, David, and Ruggeri, Fabrizio. "Protecting Classifiers from Attacks". *Statistical Science*, 39(3), 449-468, 2024.

Caballero N., William, Camacho, José Manuel, Ekin, Tahir, and Naveiro, Roi. "Manipulating hidden-Markov-model inferences by corrupting batch data". *Computers & Operations Research*, 162, 106478, 2024.

Ríos Insua, David, Naveiro, Roi, Gallego, Víctor, and Poulos, Jason. "Adversarial Machine Learning: Bayesian Perspectives". *Journal of the American Statistical Association*, 118(543), 2195-2206, 2023.

Ekin, Tahir, Naveiro, Roi, Ríos Insua, David, and Torres-Barrán, Alberto. "Augmented Probability Simulation Methods for Sequential Games". *European Journal of Operational Research*, 306(1), 418-430, 2023.

Banks, David, Gallego, Víctor, Naveiro, Roi, and Ríos Insua, David. "Adversarial Risk Analysis (Overview)". WIREs Computational Statistics, 14(1), e1530, 1-16, 2022.

Ríos Insua, David, Caballero N., William, and Naveiro, Roi. "Managing Driving Modes in Automated Driving Systems". *Transportation Science*, 56(5), 1259-1278, 2022.

Gallego, Víctor, Naveiro, Roi, Roca, Carlos, Ríos Insua, David, Campillo, Nuria. "Al in drug development: a multidisciplinary perspective". *Molecular Diversity*, 25(3), 1461-1479, 2021.

Naveiro, Roi, Redondo, Alberto, Ríos Insua, David, and Ruggeri, Fabrizio. "Adversarial Classification: An adversarial Risk Analysis approach". *International Journal of Approximate Reasoning*, 113, 133-148, 2019.

SELECTED ACADEMIC HONOURS AND GRANTS

Best Methodological Contribution in Operational Research Award. Paper: "Augmented probability simulation for sequential games", BBVA Foundation and Spanish Society of Statistics and Operations Research.

Award for best doctoral thesis on basic research in artificial intelligence, AIHUB from the Spanish National Research Council (CSIC).

SELECTED PRESENTATIONS

"Sensitivity of Bayesian inference to data deletion and replication". Invited talk at the 8th Games and Decisions in Risk and Reliability. 2025. Bocconi University, Italy.

"Poisoning Bayesian Inference via Data deletion and Replication". Artificial Intelligence and Statistics (AISTATS 2025). Phuket, Thailand.

"Bayesian forecasting dynamic models under attacks". Invited talk ant the 12th Workshop on Bayesian Inference in Stochastic Processes. 2021, CNR-IMATI, Italy.

PROFESSIONAL ACTIVITIES

2025- Coordinator of the Bayesian Inference section, Spanish Statistics and OR Society.