



Romy Rodríguez-Ravines, PhD

Connecting People, Problems, and Possibilities Through Data

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About me

Highly accomplished applied data science leader with over 25 years of experience driving innovation and delivering business results across diverse sectors, including cybersecurity, marketing, financial services, and client intelligence.

Recently, I led the design and implementation of a cyber risk quantification engine for Operational Technology (OT) networks. I specialize in the strategic application of advanced analytics to solve complex challenges, combining deep technical expertise with business vision. I bring proven leadership experience across both public and private organizations.

I hold a Ph.D. in Statistics and combine a strong academic foundation with practical expertise as a published researcher and experienced professor. My international leadership roles span Spain, Brazil, and Peru. Fluent in Spanish, English, and Portuguese.

Education

Ph.D. in Statistics

UFRJ. Rio de Janeiro, Brazil 2003–2006
CNPq Academic Scholarship (4-year financial aid)

M.Sc. in Statistics

UFRJ. Rio de Janeiro, Brazil 2001–2003
CAPES Academic Scholarship (2-year financial aid)

M.Sc. in Systems Engineering

UNI. Lima, Peru 1994–1997

B.Sc. in Statistics

UNALM. Lima, Peru 1989–1994
Ranked second in graduating class (Class of 1994)

Professional Experience

DeNexus

Madrid, 03/2021 – 10/2025

Head of Research and Modeling Strategies

Defined and executed modeling strategies powering DeRISK, a SaaS platform for cyber risk quantification in ICS/OT environments, led PhD-level team and cross-functional collaboration with cybersecurity experts, software engineering, and product management teams.

Avanade

Madrid, 09/2019 – 06/2020

Group Manager of Advanced Analytics

Designed AI/ML solutions to drive business value across sectors; led initiatives in knowledge mining, text analytics, and MLOps using Microsoft technologies.

Innova-tsn

Madrid, 10/2017 – 08/2019

Senior Manager of Advanced Analytics

Go-to expert for data science teams in Spain and UK; delivered ML solutions and designed presales technical proposals and POCs. Led initiatives in text analytics, demand forecasting, and predictive modeling, while fostering team growth and innovation.

Bayes Forecast

Madrid, 02/2008 – 09/2017

Chief Knowledge Officer

Held strategic roles including Chief Knowledge Officer, Pre-Sales Director, and Production Department Sub-Director. Led global analytics projects and teams in Spain, Brazil, Mexico. Designed forecasting systems and predictive models. Designed forecasting systems and predictive solutions, directed presales efforts, crafted technical proposals, and executed POCs.

International Organizations *Lima, 01/2001 – 12/2007*

Short-term Consultant in Statistics - Public Sector

United Nations (FAO, UNDP), BID, World Bank, EU-AN Cooperation Project on Statistics (ANDESTAD). Peruvian Government: National Institute of Statistics (INEI), Ministry of Agriculture (SENASA), Ministry of Education (MINED).

Academic & Research Roles

Part-time Professor

Alfonso X El Sabio University	2024–Now
BD in Business Analytics and	
BD in Computing and Artificial Intelligence	
Nebrija University	2020–2023
BD in Economics and International Business	
University of Alcalá	2016–2017
MD in Business Analytics and Big Data	
EAE Business School	2017–2017
MD in Business Intelligence and Technology Innovation	
University of Rio de Janeiro (UFRJ)	2001–2004
Institute of Mathematics. BD and MD	

Guest Lecturer

Master in Statistics for Data Science - UC3M	2019–2023
Master in Data Science - URJC	2017–2019
Master in Statistics and Operations Research - UB	2014

Pre and Postdoctoral Fellow

FIOCRUZ. National School of Public Health	2006–2007
FAPEX and CNPq Postdoctoral Research Grants	
FIOCRUZ. Programa de Mudanças Ambientais Globais e Saúde (PMAGS)	2004–2006

Publications

Jornadas de Investigación en Ciberseguridad	2025
Computers & Operations Research	2014
PLOS Neglected Tropical Diseases	2014; 2008
Computational Statistics	2013
Climate Research	2009
Journal of Hydrology	2008
Applied Stochastic Models to Business and Industry	2006

Innovation and Technology Transfer

Dynamic Industrial Cyber Risk Modeling based on Evidence (DICYME)	
DeNexus Tech and URJC - CPP2021-009025	2022 – 2025
Modeling of individual and aggregated cyber risk	
DeNexus Tech and ICMAT, CSIC	2021 – 2022
Research on quantitative OT cyber risk analysis	
DeNexus Tech and URJC	2021 – 2022
Actuarial study on quantifying cyber risk in critical infrastructure and evaluating cyber insurance viability	
DeNexus Tech and UC3M	2021 – 2022
Built a model to evaluate car prices in the Spanish market	
Kroll Advisory, S.L. and UC3M	2021 – 2022

Selected Talks & Posts

-  III Semana de la Ciberseguridad UAX (2025): “Leveraging Data and AI for Cyber Risk Management”
-  19 Congreso Internacional de Ciberseguridad Industrial (2022): “Modeling of Catastrophic Cyber Events in Industrial Environments. Impact on Portfolio Risk Accumulation”
-  III Conferencia Internacional en Procesos Estocásticos, Fenómenos Aleatorios y sus Aplicaciones (CIPEFA): “Bayesian Topic Modeling: Clustering for High-Dimensional Categorical Data applied to Text Analytics”
-  Big Data to Action 2018: “¿Qué es Big Data? Le preguntamos a Twitter”
-  Smart Data Summit 2018: “In-Scoring, Machine Learning y Big Data al servicio de la Puntuación Inteligente”
-  How DeNexus Leverages the Power of AI and ML in Cyber Risk Quantification and Management platform, DeRISK.
-  Cyber Risk Quantification and the Data Conundrum.

Romy Rodríguez-Ravines, PhD

Transforming data into strategic understanding and actionable insight. Thriving in environments that value innovation, I am passionate about building high-impact data science capabilities that bridge academic rigor with real-world business value. Connecting people, problems, and possibilities—I turn analytical intelligence into meaningful, data-driven impact.



 Spanish, English, Portuguese
Madrid. October, 2025.