

Beatriz García Jiménez, PhD, is Head of AI Unit at IMDEA Energy. She is a Computer Science Engineer and holds a PhD in Computer Science and Artificial Intelligence from Universidad Carlos III de Madrid (UC3M) and the Spanish National Cancer Research Centre (CNIO). Her doctoral research received the National Award for Best Doctoral Thesis from the Royal Academy of Doctors of Spain. She has more than 15 years of experience in Artificial Intelligence, Machine Learning, computational modelling and the development of data-intensive applications.

Her career combines academic research, applied industrial R&D, software development and leadership. She has worked at several universities, research centers and companies. Before joining IMDEA Energy, she was Head of Data Science at Biome Makers Inc, where she led the development of AI and data-driven technologies for biological and agricultural applications. This industrial experience includes the design and deployment of machine-learning systems, recommendation and decision-support tools, active-learning approaches, and production-oriented data science infrastructures. This combination of scientific research and industrial implementation has shaped her interest in developing AI systems that are not only methodologically sound, but also robust, reproducible and applicable to real-world decision-making.

She has more than five years of experience as scientific lead of national, international and applied R&D projects, including competitive projects funded by the Spanish Research Agency, Red.es, NextGenerationEU and private funding. She has also participated in European collaborative projects, including Horizon 2020 and FET initiatives. Her work has resulted in 25+ peer-reviewed publications, 1,000+ citations and 3 patents. She has built and supervised international teams of researchers, data scientists and engineers and has extensive experience managing multidisciplinary AI projects from scientific conception to implementation, validation and delivery.

Her research has addressed methodological and applied challenges in machine learning, computational biology, microbiome analysis and decision-support systems, with publications in journals including *Nature Biotechnology* and *Bioinformatics*. She also has more than 500 hours of university teaching experience and contributes to initiatives supporting the visibility of women in STEM.

Since 2026, she leads a new research group at IMDEA Energy focused on AI for complex energy systems, including forecasting, optimisation, flexibility, electricity and ancillary-services markets, transfer learning, uncertainty-aware decision making, explainable AI and hybrid AI-simulation approaches. The AI Unit is a member of the CYTED “Red Iberoamericana de Integración de IA en Redes Eléctricas Inteligentes”, strengthening its international collaboration in AI and smart grids.