



## **ADIA Lab to establish European headquarters in Spain to launch research programs in the fields of AI and advanced computing**

- **The Government of Spain, through the Ministry of Economic Affairs and Digital Transformation, has reached an agreement for ADIA Lab, the Abu-Dhabi-based research institute dedicated to data and computational sciences, to establish its European headquarters in Spain.**
- **The European headquarters of ADIA Lab will be located in Granada. As part of the agreement, ADIA Lab will launch five research programs with Spanish universities and research institutions to create a network that promotes scientific exchange and industrial growth between Spain and the UAE.**
- **The research areas will focus on the analysis of data and complex systems applied to public health, the environment and the digital economy, as well as high-performance computing and the development of AI.**
- **The agreement aligns with the aspirations of both countries to establish a strategic partnership in various fields including scientific and educational cooperation as announced during the state visit of the President of the Government of Spain, H.E. Pedro Sánchez, to the UAE in February 2022 and his meeting with the President of the UAE, His Highness Sheikh Mohamed bin Zayed Al Nahyan.**
- **This milestone is part of Spain's National Strategy for Artificial Intelligence and "SpAI In Talent Hub", a program aimed at advancing Spain's role as a magnet for digital talent and investment in Europe, led by the Secretariat of State for Digitization and Artificial Intelligence (SEDIA).**

Press release



Granada, 21 March 2023. The Government of Spain, through the Ministry of Economic Affairs and Digital Transformation, has signed an agreement with ADIA Lab, the Abu-Dhabi-based research institute dedicated to data and computational sciences, that will see ADIA Lab establish its European headquarters in Spain. As part of the agreement, ADIA Lab will also launch five research programs with Spanish universities and research institutions to create a network that promotes bilateral scientific exchange between Spain and the United Arab Emirates (UAE).

This agreement aligns with the areas of joint cooperation expressed in the Spain-UAE Joint Statement, issued on February 2, 2022 on a visit by the President of the Government of Spain, Pedro Sánchez, to the UAE with the goal of fostering strategic partnerships in several scientific fields, and to boost bilateral economic cooperation.

The agreement was formalised at a signing ceremony at the Royal Palace of Santo Domingo in Granada, between Carme Artigas, Secretary of State for Digitalization and Artificial Intelligence, on behalf of the Government of Spain, and Dr. Horst Simon, Director of ADIA Lab.

"Today we celebrate that Spain is becoming a pole of attraction for talent and investment at an international level, not only within Europe. The arrival of ADIA Lab's European headquarters to Spain adds to the commitment of major companies and research centers to our country. This is a milestone in our National Artificial Intelligence Strategy and the SpAIIn Talent Hub program, with which we are creating and consolidating an innovative and cutting-edge technological ecosystem around artificial intelligence, sustainability, data computing, and neurotechnologies that positions us as a leading and reference country," said Carme Artigas at the signing ceremony.

With this agreement, ADIA Lab recognises Spain as one of the leading centers of digital transformation globally, and as a partner in key areas of focus such as the digital economy, artificial



intelligence, automation and the promotion of industrial competitiveness, through the development of specialized research programs with important societal benefits.

ADIA Lab focuses on research into Data Science, Artificial Intelligence, Machine Learning, and High-Performance and Quantum Computing, across all major fields of study. It is an independent, standalone entity supported by the Abu Dhabi Investment Authority (ADIA), a globally-diversified investment institution that invests funds on behalf of the Government of Abu Dhabi. Its Advisory Board comprises leading scientists in data and computationally-intensive fields, including recipients of prestigious awards such as the Nobel, Turing, Rousseeuw, and Gordon Bell Prizes, as well as members of various National Academies of Sciences.

“ADIA Lab was created to tackle some of the world’s most pressing issues through the study of data and computational science. At the core of this ambitious goal is collaboration. Working in partnership with other leading organizations throughout the world, we will support new scientific breakthroughs through the analysis and processing of ever-increasing amounts of complex data – across all major areas of study. We are excited to partner with the Government of Spain to bring our new European headquarters to the country and to launch important research projects with some of its leading institutions,” said Dr. Horst Simon at the signing ceremony.

The laboratory will launch five research programs in collaboration with universities and research centers across the country, starting with the University of Granada, which will develop the area of interpretable AI and reliable automation.

The initial areas of focus will include:

- **Causal discovery and experimental design in public health:** computational methods and algorithms for the discovery of causal relationships for medical applications, public health policy and the study of the environment.



- **Economic modelling of climate change and its mitigation policies:** Development of Integrated Assessment Models (IAM) to assess the economic impact of climate change and the costs and benefits of different mitigation and adaptation strategies. Development of Computable General Equilibrium Models (CGE) to simulate the behavior of consumers, companies, and governments. Development of bottom-up energy models that simulate the evolution of the energy system in different scenarios. Development of sectoral models in sectors such as transport, construction, or agriculture.
- **Digital economy, distributed ledger technology and tokenization:** Developing new approaches, techniques, and computational tools to investigate the digital economy, including the role of Distributed Ledger technology (DLT) in digital transformation. Analyze the role of central bank digital currencies (CBDCs) in transforming finance from the centralized to the distributed model.
- **High-performance computing:** Development of new algorithms, techniques, and computational tools to investigate strategic research topics (climate models, digital economy, causal discovery, large-scale AI).
- **Interpretable AI and reliable automation:** Development of statistical methods that explain the performance of an AI algorithm. Development of methodologies to explain deep learning algorithms for different domains. Development of techniques that make the outcome of AI algorithms reliable for human supervisors (this includes areas, such as robustness, data privacy and federated learning, equity and data quality, green AI, and AI regulation).

The agreement has a duration of four years, extendable for periods of equal duration, and includes a framework for collaboration between European and UAE universities and research institutions. The objective is the transfer of knowledge with a direct impact on the industrial ecosystem, and the promotion of entrepreneurship.