

PRESS RELEASE

MANOLO: A new Horizon Europe project kicked off!

We are thrilled to announce the official start of MANOLO, a pioneering project funded by the European Union, under Grant Agreement No.101135782. With a €8.6 million budget, this Horizon Europe Research and Innovation Action officially commenced in January 2024 and will last 36 months.

The project's kick-off meeting took place from February 7th to 8th, 2024, in Dublin, Ireland, hosted by the prestigious <u>Ireland's National Centre for Applied AI (CeADAR)</u>. The kick-off meeting saw all project partners converge to discuss their roles, responsibilities, and aspirations for the successful realization of the project's specific objectives.

MANOLO will deliver a complete stack of trustworthy algorithms and tools to help AI systems reach better efficiency and seamless optimization in their operations, resources and data required to train, deploy and run high-quality and lighter AI models in both centralised and cloud-edge distributed environments. It will push the state of the art in the development of a collection of complementary algorithms for training, understanding, compressing and optimising machine learning models by advancing research in the areas of: model compression, meta-learning (few-shot learning), domain adaptation, frugal neural network search and growth and neuromorphic models. Novel dynamic algorithms for data/energy efficient and policy-compliance allocation of AI tasks to assets and resources in the cloud-edge continuum will be designed, allowing for trustworthy widespread deployment.

The project will be deployed and tested in lab environments via industrial-driven use cases with different distributed AI paradigms within cloud-edge continuum settings; it will be validated in verticals such as healthcare, manufacturing, and telecommunications, aligned with market opportunities identified by the AI, Data and Robotics Association (<u>ADRA</u>) and with a granular set of embedded devices covering robotics, smartphones, IoT as well as using neuromorphic chips.

Irish Minister of State of the Department of Enterprise, Trade and Employment, Mr. Dara Calleary said:

"It is hugely important that we make AI systems more energy efficient given that use of the technology is likely to become even more widespread in the coming years. We also welcome the work to reverse declining user confidence in AI and to provide more clarity around how AI systems work. These tools are going to underpin the workings of our society going forward and it's vital that the public has total confidence that those in charge of their development are seen to be taking a fair, equitable and humancentric approach."

Dr. Ricardo Simon Carbajo, Director of Innovation and Development at CeADAR and MANOLO Project Coordinator, added:

"CeADAR is very proud to serve as the leader of MANOLO, a major EU-funded project involving many of the top research and industry institutions in Europe. The aim of MANOLO is to create novel algorithms to make AI more trustworthy and energy efficient. The solution will plug into current AI systems, which will help organisations in Ireland and Europe achieve their energy efficiency targets."

The MANOLO consortium, under the leadership of **Ireland's national centre for applied AI, CeADAR,** is composed of 18 partners across 8 European countries: Ireland, Belgium, Finland, France, Germany, Greece, Romania and Spain. The consortium members include: <u>NUIDUCD-CeADAR, UPC, ATOS IT, EVIDEN RO, TUBS, NCSR "D", FDI, INRIA, Fraunhofer IIS, UPSaclay, ARCADA, KU Leuven, LAUREA, PAL ROBOTICS, BIT&BRAIN, ARX.NET, Q-PLAN, and EIT DIGITAL.</u>

