Advancing End-User Studies & Assistance with Innovation Technology of AI Digital Health Twins with brains using Generative AI models

in Horizon Europe Cluster Health projects

- HORIZON-HLTH-2025-01-CARE-01
- HORIZON-HLTH-2025-01-TOOL-03

Brief pitch presentation by GOLEM Integrated Microelectronics Solutions GmbH, Vienna, Austria (http://golem.at)

CLUSTER Health Horizon Europe Brokerage Event 2025, 5 - 6 May 2025

Our development inputs & outputs offer for the projects

- **Cutting-edge RDI methodology & technology platform** for rapid prototyping of Aland data-driven Intelligent Digital Twins (AIDT) of Complex Biophysical Cyber Systems of Systems existing in the physical and virtual worlds
- **Advanced systemic Generative AI models** using of large-scale, complex, multimodal real & synthetic data, scientific & public information & trained open source LLMs.
- **Enabling AIDTs to assist end users** in automatic monitoring & control of their systems sustainability, performance, resilience, cost-efficacy
- **Validated & demonstrated PoC prototypes** based technology applications in Horizon Europe projects: SmartUrbana, BRAINE, SmartEdge, iTwinBuild, WELLBASED, DOME
- **Open GAI models with custom performance & sustainability metrics for** predictive and personalised medicine, continuous evaluation by researchers, assessment of sustainability, performance, risks, concept testing, intelligibility, robustness, principles for ethical evaluation of AI trustworthiness.

Potential synergies with other relevant HEP & DEP projects (e.g. <u>DOME</u>)

Info & Contacts

Introduction & Overview of the approach and solutions:

https://monitoring.pharosnavigator.com/static/content/en/1077/Digital-Health-Twin.html

Video YouTube (4 min)

https://www.youtube.com/watch?v=2oeSJE9DFm8

Web sites: https://golem.at; https://golem.at; https://golem.at; https://pharosnavigator.com/

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