HYPER-AI
Revolutionising big data applications with autonomous cloud-to-edge resources

Unlock the Future of Data Processing with HYPER-AI

// HYPER-AI: Revolutionising the Network Continuum

HYPER-AI, funded by HORIZON Europe, overcomes network continuum challenges by integrating smart virtual nodes from the Cloud, Edge, and IoT to optimise intensive data processing.

Smart, Autonomous Computing Swarms

HYPER-AI introduces self-organised computing swarms of smart nodes, offering processing, storage, and communication resources. It uses semantic representation to enable seamless network integration.

Autonomic Systems for Enhanced Performance

Inspired by autonomic systems, HYPER-AI uses self-CHOP principles (self-configuration, self-healing, self-optimisation, and self-protection) to simplify deploying and managing smart swarms, ensuring efficient resource use and robust security for better performance.

Vision for a Unified Computing Continuum

HYPER-AI envisions a hyper-distributed multi-cloud/multi-edge environment unified by a collaborative framework. It aims to develop connectors for seamless integration, creating adaptive hybrid ecosystems.

Multi-Objective Optimisation Framework

HYPER-AI's optimisation framework considers infrastructure, application needs, and energy efficiency. It dynamically allocates resources, maximising use and minimising energy consumption, while supporting rapid analysis and testing.

Transforming the Future of Computing

HYPER-AI fosters a new ecosystem of devices, software, hardware, and services within a computing continuum. AI-augmented optimisation and resource management from cloud to edge enhance resource discovery, interoperability, and data handling.

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Use case #1: Industry 4.0

AR-based / AI-augmented remote assembly and Robot-as-a-Service for improved process efficiency and workers' safety

Use case #2: Green Energy

Energy efficient data processing simulation for monitoring of critical infrastructures

Use case #3: Mobility and Automotive

Accessing automated and connected vehicles computing platforms

Use case #4: Farming and Agriculture

Precision Agriculture improved by computing continuum from Cloud-to edge -to-IoT

Use case #5: Healthcare

Disease Control originating from Wild Animals to prevent future Pandemics

csem centre suisse d'électronique et de microtechnique

COMMpla Communication Platforms and Online Solutions

Cyprus University of Technology

ENEA Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile

Ελληνική Δημοκρατία Εθνικόν και Καποδιστριακόν Πανεπιστήμιον Αθηνών

Trust-iT services

Hes·so

SABO S.A.

eBOS

OdinS

Telefónica

virtual vehicle

ECLIPSE FOUNDATION

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CERTH Centre for Research & Technology Hellas

hyperai.eu

Join the HYPER-AI Revolution

Be a part of the future with HYPER-AI and join our community to make data processing across the computing continuum more flexible, efficient and innovative.

Visit our website or contact us

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