



Cognitive Computing Continuum Cluster



Get to know the research initiatives about Cognitive Computing Continuum

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MYRTUS

Multi-layer 360° dYnamic orchestration and interopeRable design environmenT for computecontinUum Systems

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Project Introduction



MYRTUS

Project Introduction – Reference Infrastructure

CLOUD LAYER

>100 km, tens of ms access/response time

Central/in-country/shared/hybrid data centres.

FOG LAYER

On-premise/near premise <100 km, <5 ms access/response time

Micro data centres (HIRO), Multi-Sensor Gateway (ABI)

EDGE LAYER - On device

Off-the shelves CPUs, GPU, HMPSoCs FPGA-based accelerators (**UNISS and UNICA**), Adaptive RISC-V with custom computing units (**UPM**).



CLOUD LAYER

Long term storage, subsystems monitoring and coordination, data mining, history analytics.

FOG LAYER

Medium term storage, Local subsystems monitoring and coordination, network virtualization, close to edge processing, cloud-edge information mediation.

EDGE LAYER

Microanalytics, collaborative and autonomous behaviour/processing, external sensing, display/actuation.

hiro

MICRODATACENTERS





Project Introduction – Cognitive Engine



Project Introduction – Design and Programming Env.



Project Use Cases

Smart Mobility Road intersection safety



CANON RESEARCH CENTRE FRANCE S.A.S.

Healthcare

Cooperative telerehabilitation







Project Impact



Project goals for the next semester



Project goals for the next semester



INTEGRATION & INTEROPERABILITY

Project goals for the next semester



INTEGRATION & INTEROPERABILITY



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