

OPEN DROIDS

BUILDING AN OPEN-SOURCE EMBODIED ELLIGENCE FUTURE



DEFINITION & SIGNIFICANCE OF EMBODIED INTELLIGENCE

Our Concept of Embodied Intelligence:

Embodied Intelligence combines the body-environment interactions & not just programmed software.







HOW DOES THE UNLOCK HAPPEN

Direct Environmental Interaction:

Physical interaction & learning loops enable accelerated behaviour loops.

Enhanced Adaptability & Robustness

Context aware feedback based learning enable faster unlock.

Role in Robotics

Interaction of the system on an embodied level creates exponential progress.



MPLICATIONS

Service Robots:

This has been our focus, leading us towards autonomous behavior starting in industrial and business environment ultimately leading to full autonomy.

Assistive Technologies:

Assistive technologies leverage physical interaction to aid individuals in daily tasks and improve quality of life.



CURRENT OPEN-SOURCE PLATFORMS & COMMUNITIES

ROS Platform:

ROS offers a flexible framework for robotics software development, enabling collaboration and code reuse among developers worldwide.

Collaborative Forums:

Online communities and forums foster global resource sharing, problem solving, and innovation among developers and researchers.



CURRENT CHALLENGES

Connectivity issues:

Embodied AI without proper connectivity is limited to its own internal data.

Latency challenges:

Currently only achieve best case scenarios of 0.5 to 1 sec latency unless best case scenario of 100 Mbps.

Fragmented ecosystem:

No unified or global ITU level global standard which sometimes creates interconnectivity issues.



ENABLEMENTS



Need for ultrareliable low latency.



Edge computing improvements.



Collaborative Hardware Projects.



Recommendations for ITU:

PROMOTE OPEN STANDARDS AND INTEROPERABILITY



Integration of embodied Ai into future 5G/6G network blueprint



Develop a trust framework for embodied Ai adoption

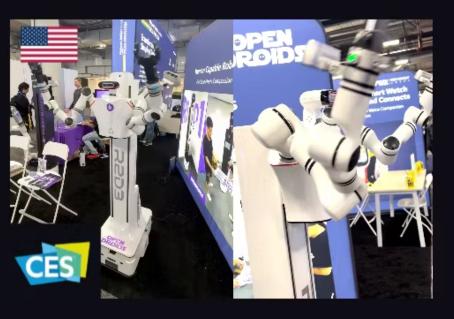
















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