

Peer Review

Review of: "Physical AI Agents: Integrating Cognitive Intelligence with Real-World Action"

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The paper proposes a modular architecture for designing Physical AI agents with 3 major core blocks - perception, cognition & actuation. It also presents design patterns for Physical Retrieval Augmented Generation and case studies on some industrial applications.

Though the ideas presented in the paper are quite interesting, they still need some improvements.

- 1) A comparative discussion with a few existing state-of-the-art design patterns may help to articulate the novelty in contributions.
- 2) There are no empirical results provided to justify the effectiveness of the proposed design patterns.
- 3) The applications section seems too long. It might be summarized.
- 4) The introduction section should clearly state the contributions and novelty of the work.
- 5) Though a section describes a few industry efforts to build platforms for Physical AI Agents, there seems to be a lack of a proper literature survey more aligned with the proposed design pattern by the author. The literature survey should also articulate how the proposed design pattern stands out compared to the existing ones.

Declarations

Potential competing interests: No potential competing interests to declare.