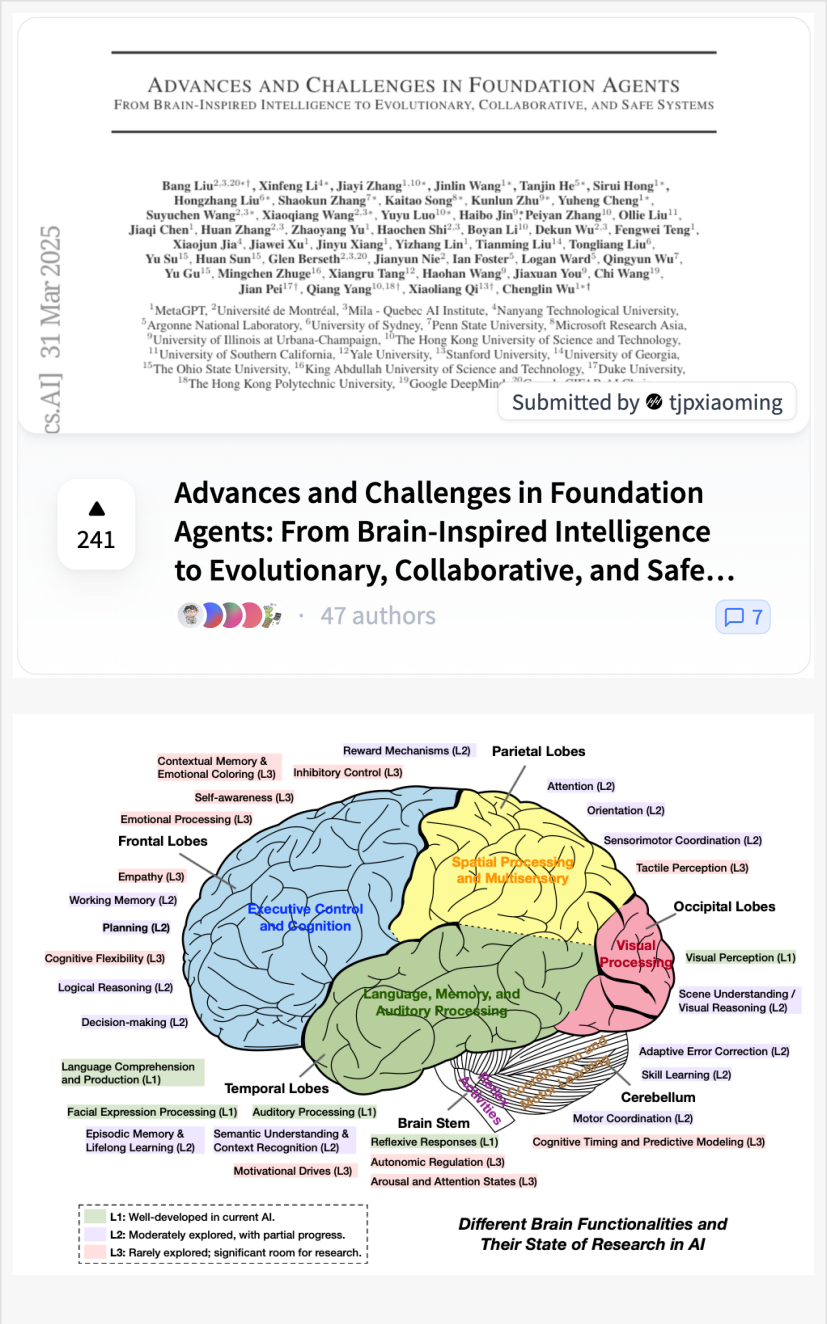
MetaGPT, Mila, and Stanford, among others, are spearheading a global collaboration aimed at defining foundational agent

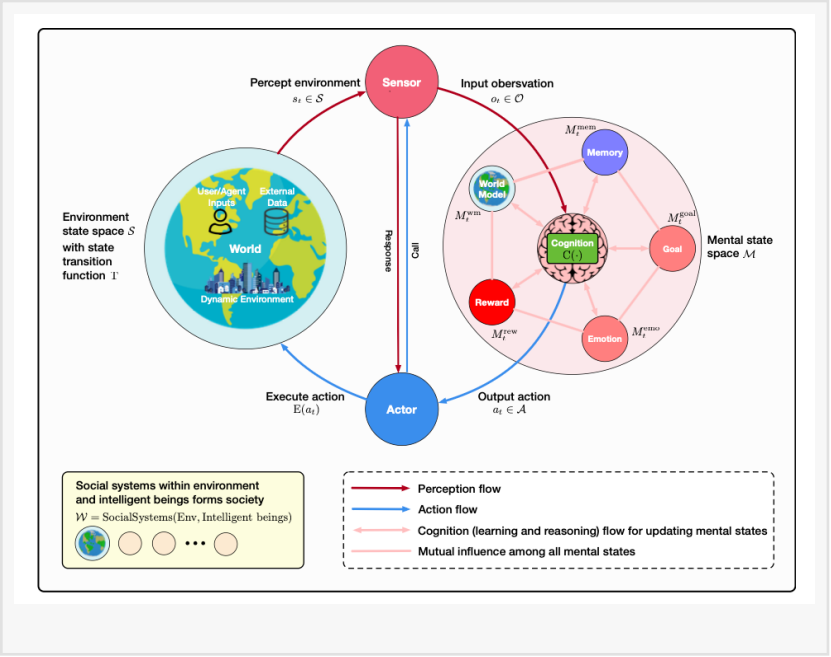
A major review outlines a blueprint for next-generation AI agents, tackling core challenges in cognition, evolution, collaboration, and safety.



FRANCISCO, CA, UNITED STATES, April 24, 2025 /EINPresswire.com/ -- Addressing the limitations of current AI agents, MetaGPT and Mila, in a significant collaboration with 45 other researchers from 20 leading global institutions, including Stanford, Yale, and Google DeepMind, today published a landmark review defining Foundation Agents. The paper, available on arXiv (2504.01990), presents a comprehensive blueprint for developing more capable, general-purpose, and safer AI systems.

Foundation Agents are proposed not as specific models, but as a holistic framework inspired by cognitive and neuroscience. This framework envisions complex intelligent systems integrating core components such as advanced cognition for reasoning and planning, multi-layered memory systems, dynamic world models for understanding environments, sophisticated perception, and robust action systems – moving significantly beyond today's simpler LLM-based agents.

The extensive review examines the critical future directions necessary for developing these advanced agents. Key areas explored include agent self-evolution for autonomous learning and improvement, multi-agent collaboration fostering collective intelligence within evolving systems, and the paramount importance of ensuring safety and alignment with human values as AI capabilities advance.



Already gaining significant attention and ranking high on academic charts, such as Hugging Face Daily Papers, the paper sets a vital research agenda for the global AI community. It emphasizes the need for a systems-level approach, integrating insights across disciplines, to build the knowledgeable, adaptable, and beneficial AI agents of the future.

Read the full paper on arXiv
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