

Artificial Intelligence Standardization Is a Key Challenge for the Technologies of the Future

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Abstract: Artificial intelligence (AI) is the future of computer technologies and at present it has achieved great progress in different areas. In this paper, we study the general AI problem from a standardization point of view, and introduce a semantic interoperability for intelligent computer systems. We propose a standard for the interior semantic representation of knowledge in the memory of an intelligent computer system, which is called the SC-code (Semantic Code). Integration of various types of knowledge is performed due to hybrid

knowledge base models. This model includes a hierarchical set of top-level ontologies that provide semantic compatibility of various types of knowledge and permits to integrate facts, specifications of various objects, logical statements, events, situations, programs and algorithms, processes, problem formulations, domain models, ontologies, and so on. A variant of the presentation of the AI standard based on the semantic representation of knowledge, in the form of a part of the knowledge base of the Intelligent Computer Metasystem (IMS.ostis) is proposed.

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