TECH OFFER

Cognitive Learning and Memory Modeling towards Human-level Synthetic Intelligence
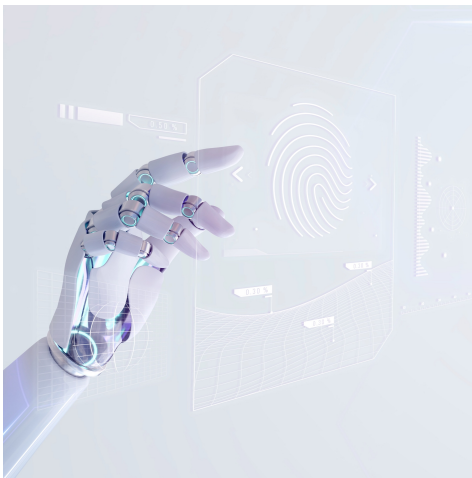
▶ MORE INFORMATION

MEGA-TREND
- **SMART Cities and SMART Infrastructure**
- **Roboslaves**

TECHNOLOGY READINESS LEVEL (TRL)
- **TRL 3**

PATENT/ GRANTED NUMBER
- **PI 2017704201**

▶ TECHNOLOGY OVERVIEW

The present invention discloses an adaptive artificial intelligence system for cognitive learning of a humanoid robot comprising a front-end neuromimetic sensorimotor perception module for detecting sensory data from a plurality of sensors and translates the sensory data into computer language, a language-grounding module for receiving human-language instructions and translates the instructions into computer language; and a processor for receiving and processing inputs from the front-end neuromimetic sensorimotor perception module and the language-grounding module; wherein the processor includes: a semantic memory; a episodic memory; a procedural memory; and a working memory; wherein the semantic memory predicts events that may cease the operation of the humanoid robot based on the temporal sequence of events encoded by the episodic memory and then the procedural memory generates a sequence of action plans to be executed by the humanoid robot based on the prediction, and the interaction of the memories are facilitated by the working memory which maintains all the necessary information online for use in executing the given instructions.

CONTACT US!

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