

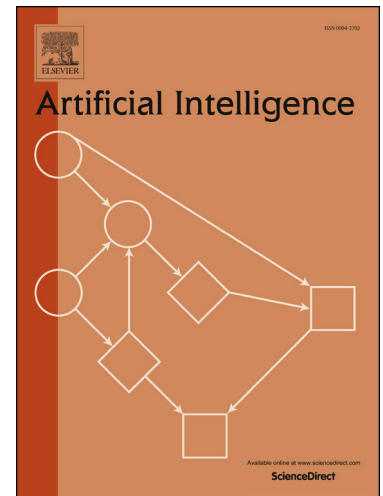
# Accepted Manuscript

Towards a Science of Integrated AI and Robotics

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PII: S0004-3702(17)30031-0  
DOI: <http://dx.doi.org/10.1016/j.artint.2017.03.003>  
Reference: ARTINT 3006

To appear in: *Artificial Intelligence*



Please cite this article in press as: K. Rajan, A. Saffiotti, Towards a Science of Integrated AI and Robotics, *Artif. Intell.* (2017), <http://dx.doi.org/10.1016/j.artint.2017.03.003>

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Editorial:  
Towards a Science of Integrated AI and Robotics

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**Abstract**

The early promise of the impact of machine intelligence did not involve the partitioning of the nascent field of Artificial Intelligence. The founders of AI envisioned the notion of embedded intelligence as being conjoined between perception, reasoning and actuation. Yet over the years the fields of AI and Robotics drifted apart. Practitioners of AI focused on problems and algorithms abstracted from the real world. Roboticists, generally with a background in mechanical and electrical engineering, concentrated on sensorimotor functions. That divergence is slowly being bridged with the maturity of both fields and with the growing interest in autonomous systems. This special issue brings together the state of the art and practice of the emergent field of integrated AI and Robotics, and highlights the key areas along which this current evolution of machine intelligence is heading.

*Keywords:* intelligent robots, cognitive robotics, autonomous systems, embodied AI, integrated systems

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