

Special Issue on **Analysis of Human Behavior for Robot Design and Control**

CALL FOR PAPERS

The analysis and comprehension of human behavior and sensorimotor control strategies is crucial in the fields of neuroscience, biomechanics, and robotics. Biologically inspired robotic systems that aim to reproduce mechanics, sensory, and actuation systems and control strategies of human beings are rapidly growing, especially in the fields where the interaction between humans and robots is very tight. Indeed, studying and replicating human behavior can provide new insights into the development of robotic and mechatronic systems for motor recovery, functional substitution, and human-robot interaction.

Several aspects are still unsolved, especially on how models and analyses of human behavior can be translated into concrete guidelines for robot design and control.

This special issue welcomes original research articles that explore systems and strategies for observation and analysis of human behavior and approaches to replicate this behavior in robotic systems conceived for human-robot interaction. Review articles which describe the current state of the art on these topics are also welcome.

Potential topics include but are not limited to the following:

- ▶ Bioinspired robots
- ▶ Human motion analysis and synthesis
- ▶ Learning by demonstration for robot motion planning and control
- ▶ Learning approaches for sensorimotor coordination and control
- ▶ Human-robot interaction
- ▶ Design and control of humanoid robots
- ▶ Robot motion planning
- ▶ Bio-inspired control strategies and sensory and actuation systems for assistive robotics
- ▶ Human-in-the-loop rehabilitation robots

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/abb/ahbrd/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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