



SPECIAL ISSUE ON ROBOTS AND AUTISM: CONCEPTUALIZATION, TECHNOLOGY, AND METHODOLOGY

GUEST EDITORS

Kim Baraka (lead GE), Carnegie Mellon University, Pittsburgh, USA / Instituto Superior Técnico, Lisbon, Portugal

Rebecca Beights, Texas Tech University, Lubbock, USA / Irabina, Melbourne, Australia

Marta Couto, INESC-ID, Lisbon, Portugal

ADVISORY EDITOR

Mike Radice, ChartaCloud | ROBOTTECA, Kensington, USA

DESCRIPTION

Increasing prevalence of Autism Spectrum Disorders (ASD) emphasizes the need for impactful research into more advanced and effective technology and strategies used for intervention, assessment, and training. Social robots are one technological domain that has been suggested as potentially effective for individuals with ASD, due to robots' repeatable and controllable social behavior, as well as the ability to engage individuals with ASD. Although existing research has demonstrated promising results in this domain, many challenges remain to be addressed. From a design perspective, a better understanding of suitable robot characteristics, scenarios, and tasks for intervention and assessment is needed. From a technological perspective, more algorithmic advances in modeling, sensing, decision-making, and adaptation over interactive scenarios may unlock more powerful and flexible solutions. From an empirical perspective, more evidence is required to evaluate deployment, efficacy, and usability of these technologies in different settings and by different users (caregivers, teachers, clinicians). Finally, ethical and philosophical considerations when designing and adopting such technologies are also notable areas of research needing further examination.

This thematic special issue in **Paladyn, Journal of Behavioral Robotics** aims at gathering the latest research addressing some of the above challenges. It was launched as a follow-up to a web panel discussion (<https://bit.ly/2N568Hr>) on the current state of socially assistive robotics in ASD, held on June 27 and organized by Chartacloud | Robottecca. We welcome high-quality submissions from authors, regardless of their affiliation(s) and relationship to the panel. Full paper submissions may include: original research, focused review papers, and opinion papers. In addition to full papers, we will also consider submissions of brief research reports in the form of a communication/note.

Contributions to the Special Issue may address (but are not limited) to the following aspects:

- ▶ intervention (clinical, school, and home settings)
- ▶ assessment, diagnosis, and monitoring
- ▶ clinician support and training

- ▶ robot embodiment and behavior design
- ▶ algorithms for intelligent robot behavior, including AI and machine learning for modeling, perception, and planning of social behavior
- ▶ autonomy and shared control
- ▶ programming interfaces for robot behavior (expert and non-expert)
- ▶ ethical and philosophical issues
- ▶ evaluation studies (hypothesis-driven, exploratory, and long-term)
- ▶ novel applications of robots in the ASD domain

Authors are requested to submit their full research papers, complying the general scope of the journal. The submitted papers will undergo the standard peer-review process before they can be accepted. Notification of acceptance will be communicated as we progress with the review process.

HOW TO SUBMIT

Before submission authors should carefully read the Instruction for Authors: www.degruyter.com/view/supplement/s20814836_Instructions_for_Authors.pdf

Manuscripts can be written in TeX, LaTeX (strongly recommended) - the journal's [LATEX template](#). Please note that we do not accept papers in Plain TEX format. Text files can be also submitted as standard DOCUMENT (.DOC) which is acceptable if the submission in LATEX is not possible. **For an initial submission, the authors are strongly advised to upload their entire manuscript, including tables and figures, as a single PDF file.**

All submissions to the Special Issue must be made electronically via online submission system Editorial Manager: www.editorialmanager.com/paladyn/

All manuscripts will undergo the standard peer-review process (single blind, at least two independent reviewers). When entering your submission via online submission system please choose the option "*SI on Robots and Autism*".

Submission of a manuscript implies that the work described has not been published before and it is not under consideration for publication anywhere else.

The deadline for submissions is March 31, 2020, but individual papers will be reviewed and published online on an ongoing basis.

Contributors to the Special Issue will benefit from:

- ▶ **indexation in SCOPUS**
- ▶ **NO submission FEES; voluntary publication fees**
- ▶ fair and constructive peer review provided by experts in the field
- ▶ **no space constraints**
- ▶ convenient, web-based paper submission and tracking system – Editorial Manager
- ▶ quick online publication upon completing the publishing process (**continuous publication model**)
- ▶ better visibility due to Open Access
- ▶ **long-term preservation** of the content (articles archived in Portico)
- ▶ extensive post-publication promotion for selected papers

* The journal is subject to an Article Processing Charge (APC) (only for accepted manuscripts - there are no submission fees). Nevertheless, the journal is able to offer high discounts and also the possibility to apply for a waiver, particularly for authors who do not have funds for publication in an open access model

We are looking forward to your submission !!!

In case of any questions please contact **Dr. Justyna Żuk** (Managing Editor of Paladyn.JBR; Justyna.Zuk@degruyter.com).