PALADYN. Journal of Behavioral Robotics
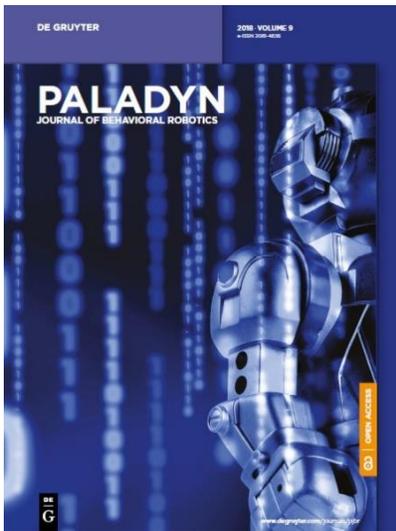
Call for Papers

Topical Issue on Deep Learning and Neural Systems in Robotics

GUEST EDITORS

Stephan K. Chalup, The University of Newcastle, Australia

Alan D. Blair, University of New South Wales, Australia

Aydan M. Erkmen, Middle East Technical University, Ankara, Turkey

Alessandro Di Nuovo, Sheffield Hallam University, UK

Neil Vaughan, Royal Academy of Engineering / University of Chester, UK

DESCRIPTION

Deep Learning can equip robots with a new level of skill by utilizing insights from neuroscience.

These new developments have impact on various types of robots, from companion robots to driver assistance in semi-autonomous vehicles. Deep Learning can enable unprecedented quality of results in tasks such as object detection, localization, communication and behavior learning.

Training deep neural networks typically requires GPU workstations or high-performance computing servers. It may require huge amounts of data or innovative training schemes. These issues indicate only some of the special challenges when utilizing deep networks in robotics.

Within this context the topics of this special issue include, but are not limited to:

- applications of deep learning
- software and hardware systems
- data acquisition for deep learning
- neural information processing systems
- deep learning training schemes and paradigms
- GPU computing for deep learning
- software engineering for deep learning
- neural networks on low powered devices
- human robot interaction and communication
- cognitive, developmental and evolutionary robotics

Authors are requested to submit their research papers to the Topical Issue 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 Instructions for Authors:
https://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 Topical Issue must be made electronically via online submission system Editorial Manager: http://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 "*TI on Deep Learning and Neural Systems in Robotics*".

The deadline for submission is 15 December 2018, but individual papers will be reviewed and published online on an ongoing basis.

Contributors to the Topical Issue will benefit from:

- **indexation in SCOPUS**
- **NO submission and 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
- **free language assistance** for authors from non-English speaking regions
- **fast 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

We are looking forward to your submission.

If you have any question, please contact **Dr. Stephan Chalup** (lead GE, Stephan.Chalup@newcastle.edu.au) or **Dr. Justyna Żuk** (Managing Editor of PJBR, Justyna.Zuk@degruyteropen.com).