



Pattern Recognition Letters

Special Issue on

Learning and Recognition for Assistive Computer Vision

Guest Editors: G. M. Farinella, M. Leo, G. Medioni, M. Trivedi

Scope

Assistive Computer Vision refers to systems that support people with physical and mental problems to better perform daily tasks enhancing their quality of life. The advances in learning and recognizing patterns are allowing a point of view in the definition and development of more efficient and effective assistive frameworks.

In the light of this, it is important to collect the most recent advancements in learning and recognition algorithms to be exploited in different applications to be employed to assist the modern society.

The aim of the special issue is to gather papers in which machine learning and pattern recognition are the key core in the design of advanced assistive computer vision systems to help human in tasks such as:

- Rehabilitation
- Training
- Mobility
- Assessment and diagnosis of physical and cognitive diseases
- Improving quality of Life
- Remote Healthcare
- Safe and security
- Remote Surgery
- Ambient Assisted Living
- Augmented Perception, Attention and Memory

List of topics

We will invite authors to contribute with high quality paper that will stimulate the research community on building theory and applications of machine learning and pattern recognition to be used in real-life environments for assistive computer vision technologies.

Research papers exploiting new and innovative methodologies of pattern recognition, computer vision and machine learning are solicited in, but not limited to, the following areas:

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| <ul style="list-style-type: none">• Augmented and Alternative Communication• Human - Robot Interaction• Mobility Aids• Rehabilitation Aids• Home Healthcare• Technology for Cognition• Activity Monitoring Systems• Manipulation Aids• Scene Understanding and exploration• Visual Attention and Visual Saliency• Smart Environments• Safety and Security• Ambient Assistive Living | <ul style="list-style-type: none">• Quality of Life Technologies• Navigation Systems• Sensory Substitution• Mobile and Wearable Systems• Applications for the Visually Impaired• Applications for hearing impaired• Applications for the Ageing Society• Datasets and Evaluation Procedures• Personalized Monitoring• Applications to improve health and wellbeing of children and elderly |
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Submissions and Revisions

Submissions to the special issue must include new, unpublished, original research. Papers must be original and have not been published or submitted elsewhere. All papers must be written in English. The submissions will be blind reviewed by at least two experts. Papers should be submitted electronically using the ELSEVIER submission system and following the Instructions for Authors as indicated at the journal home page (Papers should be prepared by adhering to the PRLetters guidelines at <https://www.elsevier.com/journals/pattern-recognition-letters/0167-8655/guide-for-authors/>). When submitting their papers through the online system, Authors should select the acronym "SI: **LR4ACV**" to make it clear that they are submitting to this SI.

All submissions will undergo initial screening by the Guest Editors for fit to the Special Issue and prospects for successfully negotiating the review process.

Submission Schedule

Submission Period: June 1-30, 2018

Author notification: July 30, 2018

Revised papers due: September 15, 2018

Final notification: October 15, 2018

Publication: November 2018

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