

The Wiley-Blackwell Journal Expert Systems: The Journal of Knowledge Engineering

Special Issue on Pattern Recognition and Artificial Intelligence for Human Behaviour Analysis
(<http://www3.interscience.wiley.com/journal/117963144/home>)

- Deadline extended -

Call for Papers

The Pattern Recognition (PR) and Artificial Intelligence (AI) scientific communities have shared knowledge and effort in order to obtain more effective solutions for many different research areas. However, although the techniques and approaches are somewhat similar, the two communities often tackle problems from rather different perspectives.

Among these research areas, Human Behaviour Analysis (HBA) has recently become a very popular topic in computer science, because of its relevance to surveillance. For instance, with the increasing use of cameras for video surveillance, it is getting almost unfeasible for security personnel to monitor scenes or to watch recorded videos looking for a particular event or visual item. Automatic interpretation of actions, gestures, and interactions among people, as well as automatic situation recognition and assessment, would be extremely useful. Actually, methods for Human Behaviour Analysis have this specific aim and they are attracting more and more researchers and ICT industries. Nevertheless, the recognition and interpretation of human behaviours are still challenging problems.

Given these premises, this Special Issue brings together researchers who address the problem of HBA from the PR and/or the AI perspective. High-quality original papers are solicited for this special issue. Topics of interest include (but are not limited to):

- Gesture and activity classification
- Multi-person interactions
- Multi-camera coordination and data fusion for HBA
- Event recognition and abnormal behaviour detection
- Crowd analysis for behaviour monitoring and alerting
- Machine learning methods for HBA
- Statistical pattern recognition methods for HBA
- Semantic video annotation
- Semantic scene representation and interpretation
- Situation classification and assessment
- Datasets and metrics for performance evaluation of HBA systems

This special issue follows from a very successful workshop, the first Workshop on Pattern Recognition and Artificial Intelligence for Human Behaviour Analysis (PRAI*HBA - <http://imabelab.ing.unimore.it/prai4hba/>) held in Reggio Emilia (Italy) on December 12, 2009 during the AI*IA 2009 Conference.

We now invite members of the research community to submit original articles covering these issues. Although articles must be based on original research, extended versions of workshop papers may be acceptable if they contain at least 30% of new material.

Although there is not template for submissions, authors should follow the Expert Systems Journal format described at <http://www3.interscience.wiley.com/journal/117963144/home>. To avoid delays in processing, the title of the submission should begin "PRAI*HBA special issue:". Both .doc and .pdf are welcome.

Prospective authors should submit an electronic copy of their complete manuscripts through the Manuscript Central system at <http://mc.manuscriptcentral.com/exsy>, according to the following timetable:

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| <ul style="list-style-type: none">• Manuscript Due: April 1, 2010 May 1, 2010 (extended)• First Round of Reviews: September 1, 2010 |
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Guest Editors

- Rita Cucchiara, University of Modena and Reggio Emilia (Italy)
- Luca Iocchi, University "La Sapienza" – Rome (Italy)
- Andrea Prati, University of Modena and Reggio Emilia (Italy)
- Roberto Vezzani, University of Modena and Reggio Emilia (Italy)