

## **1<sup>st</sup> IEEE Special Session on [Active and Autonomous Learning \(AAL\)](#)**

**In conjunction with [IEEE World Congress on Computational Intelligence \(WCCI 2010\)](#)**

**Competition on Active Learning: win USD 3200 in prizes**

**<http://clopinnet.com/al>**

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**Aims:**

Much of machine learning and data mining has been so far concentrating on analyzing data already collected, rather than collecting data. While experimental design is a well-developed discipline of statistics, data collection practitioners often neglect to apply its principled methods. As a result, data collected and made available to data analysts, in charge of explaining them and building predictive models, are not always of good quality and are plagued by experimental artifacts.

This special session aims to offer a meeting opportunity for academics and industry-related researchers, belonging to the various communities of \*Computational Intelligence\*, \*Machine Learning\*, \*Vision systems\*, \*Experimental Design\* and \*Data Mining\* to discuss new areas of active and autonomous learning, and to bridge the gap between data acquisition or experimentation and model building. How active sampling and data acquisition, can contribute towards the design and modelling of highly intelligent autonomous learning systems for the recognition of complex (abnormal) behaviours is intended to be the catalyst and the aggregation stimulus for the overall event. Thus, there is a considerable interest in developing new methods and in extending and adapting existing traditional approaches. The results of the active learning competition will also be discussed in this special session.

Topics of interest to the workshop include (but are not limited to):

- Experimental Design
- Active Learning
- Autonomous Learning
- Incremental Learning
- Autonomous intelligent systems
- On-line learning
- Machine Learning for Data Mining
- Learning from unlabeled data.
- Artificial Vision
- Agent and Multi-Agent Systems
- Hybrid Systems
- Unsupervised Learning
- Classification Methods
- Novelty Detection
- Surveillance Systems and solutions (object tracking, multi-camera algorithms, behaviour analysis and learning, scene segmentation, system architecture aspects, operational procedures, usability, scalability)
- Gesture and Posture Analysis and Recognition
- Case Studies (shopping malls, railway stations, airport lounges, bank branches, etc)
- Autonomous Robots
- Industrial and Commercial Applications of Intelligent Methods
- Biometric Identification and Recognition
- Extraction of Biometric Features (fingerprint, iris, face, voice, palm, gait)
- Email, Web and Networks Security

**Sponsors:**

- INNS Special Interest Group on Autonomous Machine Learning (SIG AML)
- The European Pascal2 network of excellence
- Orange
- Microsoft

**Important dates:**

Paper submission:	31 January 2010
Competition final testing period begins:	1 February 2010
Competition ends:	28 February 2008
Notification of acceptance:	15 March 2010
Camera-ready:	2 May 2010
Early registration:	23 May 2010
IEEE WCCI 2010 Conference:	19-23 July 2010

**Submission Guidelines:**

Please follow the regular submission guidelines of WCCI 2010 <http://www.wcci2010.org/submission> and submit your paper to the paper submission system: <http://iee-cis.org/conferences/ijcnn2010/upload.php>. Select the correct special session AND notify the chairs of your submission by sending email to: [aal@clopinnet.com](mailto:aal@clopinnet.com).

**Contact:**

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