



Workshop on Learning strategies and data processing in nonstationary environments (LEAPS 2013)



9th Artificial Intelligence Application and Innovation Conference, (Paphos, Cyprus September 30 - October 2, 2013)

The workshop is supported by the EU 7th Framework Program iSense, www.i-sense.org

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Workshop Aims

Most machine learning techniques assume, either explicitly or implicitly, that the data-generating process is stationary. This assumption does not truly hold in the real world representing, in many cases, a simplistic approximation of the reality. Data from real-world scenarios are often affected by nonstationarities and, during operational life, their describing model (or distribution) diverges from the one that yielded the training set. Learning-based systems have to be up-to-date to be effective, thereby requiring adaptation mechanisms to deal with nonstationary environments.

The workshop focuses on intelligent solutions to analyze/process data acquired in nonstationary environments. Original contributions in the field of fault detection and diagnosis, as well as cognitive approaches for learning characteristics of the process to handle nonstationarity are particularly welcome. We encourage submissions presenting novel theoretical, methodological or experimental results.

The workshop will be held within the 9th Artificial Intelligence Application and Innovation Conference, (Paphos, Cyprus, September 30 - October 2, 2013) <http://aiai2013.cut.ac.cy>

Important dates

Paper submission:

April 26, 2013

Author notifications:

May 24, 2013

Camera-ready submission:

June 14, 2013

Early registration:

June 14, 2013

Conference Dates:

Sept. 30 – Oct. 2, 2013

Topics

Papers must present original work or review the state-of-the-art in the following non-exhaustive list of topics:

- Computational Intelligent solution for Fault Detection/ Isolation/ Identification;
- Change-Detection Tests (or Novelty-Detection Tests);
- Change Detection exploiting contextual information;
- Adaptive Classifiers for Concept Drift;
- Concepts Drift and Recurring Concept management;
- Embedded systems implementing computational intelligence techniques to achieve intelligent behavior in nonstationary environments;
- Adaptive solutions to operate in evolving/faulty environments;
- Intelligent embedded systems for applications such as: intelligent buildings, robotics, homeland security, environmental monitoring, sensor networks, water distribution networks, Intrusion detection in computer networks;
- Application domains where data are affected by concept drift.

Paper submission

Submissions should contain original, high quality, not submitted or published elsewhere work.

Workshop papers will be included in the conference proceedings (published by Springer).

Further information and Paper submission can be found at the workshop homepage

<http://aiai2013.cut.ac.cy/leaps-2013/>

Please make sure you select the workshop track in the first step of the submission process.