

## Call for Papers and Posters

### Workshop on Machine Learning Algorithms, Systems and Applications

Organized as part of the IEEE 13<sup>th</sup> international Conference on Machine Learning and Application  
(ICMLA-2014)

Detroit USA

December 3-6, 2014

For more information and paper submission visit:

<http://www.icmla-conference.org/icmla14/>

Many computer applications result in large volumes of data that require a set of techniques and tools to extract useful information for decision support, prediction, exploration and understanding of the phenomena governing the data sources. This workshop aims to bring together professionals, researchers, and practitioners to discuss efficient techniques, methods and tools to manage, exploit and interpret the increasing amount of data in environments that may change continuously. The goal is to build models that are able to tackle and govern the high variability of complex non-stationary systems. Such systems are being explored in various applications such as: medical diagnostics, robotics, business, industrial control, fault detection, quality control, surface inspection, system identification, transportation, communications, web applications, environmental monitoring, biomedical systems, decision support systems, security, and electronic services.

This workshop invites submissions with newly development from those working in areas of machine learning algorithms, systems and applications. Topics covered by this workshop include but are not limited to:

- Classification,
- Clustering,
- Data mining and machine learning techniques,
- Incremental learning methods,
- Adaptive, life-long and sequential learning,
- On-line classification and regression methods,
- Evolving structural components and systems modelling
- Incremental, evolving un-supervised methods
- Incremental/on-line Dimension reduction methods
- Concepts to address drifts and shifts in data streams (weighting, gradual forgetting etc.)
- On-line/Incremental Active and Semi-supervised learning concepts
- On-line Human-machine interaction and the incorporation of background knowledge
- Adaptive data pre-processing and knowledge discovery
- Real world applications such as:
  - Monitoring,
  - On-line quality control systems,
  - Fault detection, isolation and prognosis,
  - Very huge data bases,
  - Web applications,
  - Decision Support Systems,
  - And many more ....

We encourage researchers to submit full research papers (6 pages) and short research papers (4 pages) reporting work in progress. All accepted papers from the two types of submissions will be included in the proceedings to be published by IEEE Press.

Authors should submit papers through the main conference submission website. Papers must correspond to the requirements detailed in the instructions to authors. All conference submissions will be handled electronically. Detailed instructions for submitting the papers are provided on the conference home page at:

<http://www.icmla-conference.org/icmla14/>

Accepted papers should be presented by one of the authors to be published in the conference proceedings. If you have any questions, do not hesitate to direct your questions to the workshop organizers.

### **Important Dates:**

Paper Submission Deadline:	August 6 <sup>th</sup> , 2014
Notification of acceptance:	September 7 <sup>th</sup> , 2014
Camera-ready papers & Pre-registration:	October 1 <sup>st</sup> , 2014
The ICMLA Conference:	December 3 <sup>rd</sup> , 2014

### **Workshop Chairs:**

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### **Preliminary program committee members (to be confirmed):**

Itamar Arel, University of Tennessee, USA  
Patrice Billaudel, University of Reims, France  
Marcin Budka, Bournemouth University, UK  
Jason J. Corso, The state University of New York, USA  
Damian Coyle, University of Ulster, UK  
Anthony Fleury, Ecole des Mines de Douai, France  
Ratko Grbić, University of Osijek, Croatia  
Fernando Gomide, University of Campinas, Brazil  
Laurent Hartert, University of Reims, France  
Michael Herrmann, University of Edinburgh, UK  
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