Call for Papers and Posters
Workshop on
International Conference on Machine Learning and Applications in
Health Informatics
ICMLA-HI 2012
Organized as part of the IEEE 11th international Conference on Machine Learning and Application
(ICMLA-2012)
Boca Raton Marriott Hotel, Boca Raton, Florida USA
December 12-15, 2012
For more information and paper submission visit:
http://www.icmla-conference.org/icmla12/

The advancement of technology and computational science has influenced a wide range of fields, including clinical research leading to health informatics as an emerging vital research area which is attracting more attention in academia and industry. Health informatics combines computational science and the clinical world to help improve the treatment of patients. Specifically, health informatics deals with resources, devices, and methodologies required for optimizing the acquisition, storage, maintenance, retrieval, and use of healthcare information and resources for effective diagnosis and treatment of patients.

The goal of this research track is to bring together professionals, researchers, and practitioners in the area of health informatics to present, discuss, and share the latest findings in the field, and exchange ideas that address real-world problems with real-world solutions.

Topics covered by ICMLA-2012 include but are not limited to work in progress as well as cutting-edge and novel findings on the latest trends and developments in health informatics, encompassing areas such as:

- Clinical and hospital human resource management and performance analysis
- Computer aided diagnosis and control
- Computational biomedicine, genomics, proteomics, transcriptomics, metabolimics and sociogenomics
- Controlled and optimized utilization of resources
- Data analysis and disease biomarker prediction
- Data mining and machine learning techniques in health informatics
- Drug design and patient response
- e-health and web-based information services
- Evaluation and use of information technology in healthcare
- Healthcare applications of mobile and pervasive technologies
- Human-computer interaction
- Future developments in technologies and applications
- Intelligent health information systems and decision support systems
- Integration and sharing of heterogeneous health information systems and data sources
- Information and image retrieval
- Language parsing methods in biomedicine
- Modelling, simulation, and evaluation of healthcare services
- Mobile solutions for sharing information in healthcare services
- Patient tracking and monitoring: spatio-temporal models
- Privacy protection and data security in health informatics systems
- Process management and collaborative work
- Reuse in Health Information System development and maintenance
- Signal processing and streaming databases
- Applications to epidemiology
- Social network modelling and analysis in health informatics
- User interfaces and visualization for health informatics systems
- Issues arising from data scalability
- Design of clinical trials and clinical outlier detection

We encourage researchers to submit full research papers (6 pages), short research papers (4 pages), and posters (2 pages) reporting work in progress. All accepted papers from the three types of submissions will be included in the proceedings to be published by IEEE Press. Full and short papers will be scheduled for presentation during the conference. Posters will be included in the poster session which is open for discussion with participants. Extended versions of selected papers will be invited for journal publication.

**Important Dates:**
August 6\textsuperscript{th}, 2012 Paper submission deadline
September 7\textsuperscript{th}, 2012 Acceptance Notification
October 1\textsuperscript{st}, 2012 Camera-ready paper due
TBA Author registration due
December 12-15, 2012 Conference events

**Workshop General Chair:**
Reda Alhajj, University of Calgary, Canada

**Workshop Co-Chairs:**
Wadhah Almansoori, Alberta Health services, Calgary, Alberta, Canada
Jason Van Hulse, Florida Atlantic University, USA
Kehan Gao, Eastern Connecticut State University, USA
Keivan Kianmehr, University of Western Ontario, London, ON, Canada