

Health Informatics Workshop

The 14th International Conference on Information Reuse and Integration

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 that is attracting more attention in academia and industry. Health informatics combines computational science and the clinical world to help improve the treatment of patients; it 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 workshop track is to bring together professionals, researchers and practitioners in the area of Health Informatics to present, discuss and share the latest finding in the field, and exchange ideas that address real-world problems with real-world solutions. In addition, the workshop also invites papers related to Big Data Analytics, an emergent area of data mining research with many challenges and problems to explore. Big Data Analytics is the process of examining large amounts of data of a variety of types and domains, such as Bioinformatics and Genome Data, to uncover hidden patterns, unknown correlations and other useful information.

Topics covered by IRI-HI 2013 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
- Computational biomedicine, genomics, proteomics, transcriptomics, metabolomics, sociogenomics
- Controlled and optimized utilization of resources
- Data analysis and disease biomarker prediction
- Data mining and machine learning techniques in health informatics
- Drug design, disease diagnosis and control
- 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
- Integration and sharing of heterogeneous health data sources
- Information and image retrieval
- Language parsing methods in biomedicine
- Modeling, 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
- Spread and control of epidemics
- Social network modeling and analysis in health informatics
- User interfaces and visualization for health informatics systems
- Big data analytics and its applications

Authors are invited to submit a paper up to 8 pages (in English) in double-column IEEE format following the submission guidelines available at the IRI-2013 website. Papers must be original and not submitted to or accepted by any other conference or journal. An electronic version (PDF format) of the full paper should be submitted by the paper submission deadline and following submission guidelines available at the IRI-2013 website – please select the Health Informatics Workshop track. All submissions will be acknowledged.

Each paper will be peer reviewed by at least two to three experts in the topical area. Papers accepted by the workshops will be published in the conference proceedings published by the IEEE Computer Society Press. The best paper from the Workshop will be recognized for award presentation.

A select group of outstanding papers will be selected for publishing their expanded versions in a Special Issue of the “Network Modeling Analysis in Health Informatics and Bioinformatics” journal by Springer Publishing. In addition, a select group of outstanding papers will be selected for publishing their expanded versions in a Special Issue of the newly formed “Journal of Big Data”, by Springer Publishing.

Key Dates:

- May 6, ~~April 23~~, 2013 – Submission of abstract (Recommended)
- May 10, ~~April 30~~, 2013 – Paper submission deadline
- June 3, ~~May 31~~, 2013 – Acceptance Notification
- June 17, ~~June 7~~, 2013 – Camera-ready paper due
- June 17, ~~June 7~~, 2013 – Author registration due
- TBA – Advance (discount) registration for general public and other co-author
- TBA – Hotel reservation (special discount rate) closing date
- August 14-16, 2013 – Conference events

Paper Submission:

Authors should follow the paper submission guidelines available at the IRI-2013 website. Please choose the Health Informatics Workshop track when submitting a paper.

Workshop General Chairs:

Taghi M. Khoshgoftaar, Florida Atlantic University, Boca Raton, Florida, USA
Reda Alhajj, University of Calgary, Calgary, Alberta, Canada

Workshop Co-Chairs:

Naeem Seliya, Florida Atlantic University, Boca Raton, Florida, USA
Keivan Kianmehr, TeraDada Inc, California, USA
Wadhah Almansoori, Alberta Health Services, Calgary, Alberta, Canada
Randall Wald, Florida Atlantic University, Boca Raton, Florida, USA

Program Committee:

TBA