



2nd International Conference on Big Data and Analytics in Healthcare

Singapore • 22nd - 24th July 2014

PROGRAM INVITATION

Big data analytics is already making large impacts in finance, manufacturing, retail, and social networks. Healthcare, too, is beginning to experience a data tsunami due to the rapid adoption of information systems generating huge volumes of primary and secondary data. To stay competitive and effective, healthcare organizations should prepare to brace themselves for the oncoming data deluge.

The International Conference on Big Data and Analytics in Healthcare (BDAH 2014) provides a leading forum for researchers, healthcare administrators, care-providers, and policy makers to disseminate and share cutting-edge research and practice and gain insights into the challenges, opportunities, novel strategies, and analytic tools and techniques for dealing with big data in healthcare.

Conference website: <http://www.bdah.org>

[NEW] BEST PAPER AWARDS

Best paper awards will be given in all categories.

[NEW] JOURNAL SPECIAL ISSUES

High quality and relevant papers from the conference will be fast-tracked to special issues of Information Systems Frontiers (<http://www.som.buffalo.edu/isinterface/ISFrontiers/forthcoming1/CFP-ISF-SI-BigData.pdf>) and Methods of Information in Medicine.

IMPORTANT DATES

Submissions Open: Tuesday, October 8, 2013

Workshop Proposal Submission Deadline: Friday, January 31, 2014 (11:59 PM Singapore time)

Paper Submission Deadline: Monday, March 3, 2014 (11:59 PM Singapore time)

Notification to authors: Monday, April 14, 2014

Early Registration ends: Monday, June 2, 2014

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SUBMISSION TYPES

The BDAH 2014 Program Committee invites submissions of completed papers, poster papers, abstract presentations, and pre-conference workshop proposals that advance knowledge of healthcare data analytics. More details about the submission types and formats can be found at the [conference website](#). Submissions will be accepted through [EasyChair](#).

Completed papers are full-length papers of completed research or practice projects. Accepted completed papers will be presented at BDAH 2014 and published in the BDAH 2014 proceedings. See list below for potential topics of interest.

Poster papers are the preferred format for presenting preliminary results or results of small scale studies, illustrating and discussing innovative systems and services, describing experimental and in-practice projects and programs, reporting experiences with educational programs, and other dimensions of healthcare data analytics. Accepted papers will be presented as posters at BDAH 2014 and published in the BDAH 2014 proceedings. See list below for potential topics of interest.

Abstract papers format allows for the presentation of research or practice for which the author wishes to reserve publication rights for future consideration. Accepted abstract papers will be presented at BDAH 2014 but only the abstract will be published in the proceedings. Abstract papers may be submitted in either the format of Completed papers or Poster papers (see above). See list below for potential topics of interest.

Pre-conference Workshop Proposal Half-day workshops are dedicated to special topics that are of interest to the conference audience. Half-day workshops include three and a half (3.5) hours of instruction. The conference seeks a balance between workshops that address essential theory and principles, with those that address practical applications, current issues, and emerging trends and developments. All presenters should be available to conduct their workshop on Tuesday July 22.

SAMPLE TOPICS

We welcome empirical, technical, conceptual, or practice papers in relevant areas including but not limited to the following topics:

Techniques for Big Data Analytics in Healthcare

- Knowledge discovery (e.g., text/data mining) by integrating data across care settings and EHR applications (e.g., results review, medication administration, disease progression, and image management)
- Developing and refining EHR data standards to improve analytical insights
- Visualization of big health/healthcare data for sense-making and prediction
- Assuring information system security and personal privacy
- Identifying, representing, and modeling biological structures
- Statistical analyses of large health/healthcare datasets
- Predictive analytics for identifying health risks
- Deriving data insights from mobile health, web 2.0, social media (e.g., online health communities) and wearable computing technologies
- Linking biomedical knowledge from diverse primary sources (e.g., automated indexing, classification)
- Empirical research involving big data and/or data analytics

Applications of Big Data Analytics in Healthcare

- Health services perspectives
 - Data-driven optimal planning and scheduling
 - Using analytics to improve healthcare outcomes (patient safety, medical error reduction etc.)
 - Developing data-driven systems that better support patient-provider interaction
 - Improving healthcare workflow and process efficiency
 - Supporting practice at a distance (telehealth)
- Clinical perspectives
 - Bioinformatics
 - Personalized medicine
 - Developing systems to support and improve diagnostic accuracy
 - Clinical decision support systems
 - Providing just-in-time access to the biomedical literature & other health information
 - Translational research integration – integrating biological knowledge to clinical care

- Public health perspectives
 - Improving government and community policy relevant to health quality
 - Detecting disease outbreaks & biological threats
 - Monitoring and managing population health
 - Delivering health information and knowledge to the public
- Consumer health perspectives
 - Personal health records
 - Self-care systems
 - Social media
 - Internet health

PROGRAM COMMITTEE

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