



Call for Papers

The Sixth Workshop on Data Mining in Biomedical Informatics and Healthcare (DMBIH'18)

<http://facweb.cs.depaul.edu/research/vc/ICDM18/index.html>

Singapore, November 17-20, 2018

In conjunction with the IEEE ICDM 2018

The Sixth Workshop on Data Mining in Biomedical Informatics and Healthcare aims to provide a forum for data miners, informacists, data scientists, and clinical researchers to share their latest investigations in applying data mining techniques to biomedical and healthcare data. The increasing availability of large and complex data sets to the research community, triggers the need to develop more advanced and sophisticated data analytical techniques to exploit and manage these big data. The broader context of the workshop comprehends artificial intelligence, information retrieval, machine learning, and knowledge extraction methods using biomedical image analysis and natural language processing. Submissions are invited to address the need for developing new methods to mine, summarize and integrate the huge volume and diverse modalities of the structured and unstructured biomedical and healthcare data that can potentially lead to significant advances in the field.

Topics of interest include but are not limited to:

- Classifying and clustering big data in electronic health records (EHRs)
- Classifying and clustering temporal data in EHRs and biomedical data in high dimensional spaces
- Application of deep learning methods to clinical data
- Topic modeling / detection in large amounts of clinical textual data
- Data preprocessing and cleansing to deal with noise and missing data in large biomedical or population health data sets
- Algorithms to speed up the analysis of big biomedical data
- Novel visualization techniques to facilitate the query and analysis of clinical data
- Statistics and probability in large-scale data mining
- Evidence-based medicine
- Medical image data mining
- HIPAA compliance data mining
- Pharmacogenomics data mining



- Biological markers detection
- Biological and clinical data analysis and integration for translational research
- Computational genetics, genomics and proteomics

Important Dates

- Papers Due: ~~August 7, 2018,~~ August 14, 2018
- Author Notifications: ~~September 4, 2018,~~ September 10, 2018
- Camera-ready deadline and copyright forms: September 20, 2018

Submission and Procedures

[Paper submissions](#) will be done through the [IEEE ICDM Workshop CyberChair submission system](#). As per ICDM instructions, papers are limited to a maximum of ten pages, and follow the [IEEE ICDM format requirements](#). All accepted workshop papers will be published in a formal proceedings by the IEEE Computer Society Press. One paper will be selected for the best paper award, which will be awarded at the workshop.

Submission implies that, if the paper is accepted, at least one of the authors will register and present the paper in order to be published in the Workshop Proceedings.

Submitted papers must represent original unpublished research that is not currently under review for any other conference or journal. Papers not following these guidelines will be rejected without review and further action may be taken, including (but not limited to) notifications sent to the heads of the institutions of the authors and sponsors of the conference. Submissions received after the due date, exceeding length limit, or not appropriately structured may also not be considered. Authors may contact the conference General Chairs for more information.

Journal's Special Issue

Selected papers will be invited for publication in a special issue of the [IEEE/ACM Transactions on Computational Biology and Bioinformatics \(TCBB\)](#)

Workshop Chair

- Daniela Stan Raicu, DePaul University

Workshop Organizers

- Samah Jamal Fodeh, Yale University
- José D. Martín-Guerrero, University of Valencia



- Mohammad-Reza Siadat, Oakland University

Program Committee Members

- Sameer Antani, NIH National Library of Medicine
- Carlo Barbieri, Fresenius Medical Care
- Carlo Combi, University of Verona
- Paul Bradley, MethodCare, Inc.
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- Rosa Figueroa, University of Utah
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- Maryellen Giger, University of Chicago
- Hamid Soltanian-Zadeh, Henry Ford health System
- Juan Gómez, University of Valencia, Spain
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- Paulo J. G. Lisboa, Liverpool John Moores University, UK
- Flavio Mari, Fresenius Medical Care, Bad Homburg, Germany
- Theophilus Ogunyemi, Oakland University
- Doug Redd, University of Utah.
- Emilio Soria, University of Valencia, Spain
- Abbas Babajani-Feremi, University of Tennessee Health Science Center
- Szilard Vajda, NIH National Library of Medicine
- Joan Vila Francés, University of Valencia, Spain