



CALL FOR PAPERS

The 10th Data Mining in Biomedical Informatics and Healthcare (DMBIH'22) Workshop

<https://www.oakland.edu/secs/dmbih-workshop-2022>

Orlando, FL, USA, November 30 – December 3, 2022

In conjunction with the IEEE ICDM 2022

The 10th 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, deep 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
- Social media data analysis for healthcare applications

Important Dates

- Workshop paper submission: September 6, 2022
- Workshop paper notification: September 23, 2022
- Camera-ready deadline and copyright forms: October 1, 2022
- Early bird registration finishes: October 10, 2022
- Conference dates: November 30 - December 3, 2022
- Tentative Workshop Date: November 30, 2022

Submission and Procedures

Paper submissions will be done through the IEEE ICDM Workshop CyberChair submission system. To submit a paper, visit the following webpage: https://wi-lab.com/cyberchair/2022/icdm22/scripts/ws_submit.php?subarea=S and click on “Workshop on Data Mining in Biomedical Informatics and Healthcare (DMBIH)” or use the link below:

https://wi-lab.com/cyberchair/2022/icdm22/scripts/submit.php?subarea=S03&undisplay_detail=1&wh=/cyberchair/2022/icdm22/scripts/ws_submit.php

The submissions should follow the IEEE ICDM format requirements (http://www.ieee.org/conferences_events/conferences/publishing/templates.html). All accepted workshop papers will be published in 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.

Journal’s Special Issue

TBD

Keynote Speaker

- TBD

Workshop Chairs

- Mohammad-Reza Siadat, PhD – Oakland University
- Samah Jamal Fodeh, PhD – Yale University

Last Year’s Program Committee Members

- Sameer Antani, NIH National Library of Medicine
- Suzan Arslanturk, Wayne State University
- Abbas Babajani-Feremi, University of Tennessee Health Science Center
- Carlo Barbieri, Fresenius Medical Care
- Paul Bradley, MethodCare, Inc.
- Ameen Eetemadi, University of California, Davis
- Rosa Figueroa, University of Utah
- Jacob Furst, DePaul University
- Adam Gaweda, University of Louisville
- Maryellen Giger, University of Chicago
- Juan Gómez, University of Valencia, Spain
- Ali Haddad, Yale University
- Kourosh Jafari-Khouzani, Harvard University

- Wen-Yang Lin, National University of Kaohsiung
- Ian H. Jarman, Liverpool John Moores University, UK
- Paulo J. G. Lisboa, Liverpool John Moores University, UK
- Flavio Mari, Fresenius Medical Care, Bad Homburg, Germany
- Al-Garadi Mohammed Ali Derhem, Emory University
- Destinee Morrow, Berkeley Lab
- Gunter Neumann, MLT-Lab, DFKI Saarbrücken
- Theophilus Ogunyemi, Oakland University
- Doug Redd, University of Utah
- Abeed Sarker, Emory University
- Hamid Soltanian-Zadeh, Henry Ford health System
- Emilio Soria, University of Valencia, Spain
- Szilard Vajda, NIH National Library of Medicine
- Joan Vila Francés, University of Valencia, Spain
- T. Elizabeth Workman, George Washington University
- Jie Zheng, ShanghaiTech University