



# CALL FOR PAPERS

**The 9<sup>th</sup> Data Mining in Biomedical Informatics and Healthcare (DMBIH'21) Workshop**

<https://medicine.yale.edu/cbds/event/the-9th-workshop-on-data-mining-in-biomedical-informatics-and-healthcare-dmbih21-in-conjunction-with/>

Auckland, New Zealand – December 7-10, 2021

In conjunction with the IEEE ICDM 2021

The 9<sup>th</sup> 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 3, 2021
- Workshop paper notification: September 24, 2021
- Tentative Workshop Date: December 7, 2021
- Conference: December 7 -10, 2021

## **Submission and Procedures**

Paper submissions will be done through the Workshop submission system. To submit a paper, visit the following page:

[https://wi-lab.com/cyberchair/2021/icdm21/scripts/submit.php?subarea=S08&undisplay\\_detail=1&wh=/cyberchair/2021/icdm21/scripts/ws\\_submit.php](https://wi-lab.com/cyberchair/2021/icdm21/scripts/submit.php?subarea=S08&undisplay_detail=1&wh=/cyberchair/2021/icdm21/scripts/ws_submit.php)

As per ICDM instructions, papers are limited to a maximum of eight pages including the bibliography and appendices (if any). The submissions should follow the IEEE ICDM format requirements (<https://www.ieee.org/conferences/publishing/templates.html>). All accepted workshop papers will be published in formal proceedings by the IEEE Computer Society Press, if at least one of the authors register and present the paper. One paper will be selected for the best paper award, which will be awarded at the workshop.

## **Journal's Special Issue**

TBD

## **Workshop Chair**

- Samah Jamal Fodeh, PhD – Yale University

## **Workshop Organizers**

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

## **Last Year's Program Committee Members**

- Suzan Arslanturk, Wayne State University
- Abbas Babajani-Feremi, University of Texas at Austin
- Carlo Combi, University of Verona, Italy
- Rosa Figueroa, University of Utah
- Tae-Hyun Hwang, Cleveland Clinic Foundation
- Kourosh Jafari-Khouzani, IBM Watson Health
- Sumit Jha, University of Texas at San Antonio
- Stefan Kramer, Johannes Gutenberg University, Germany
- Wen-Yang Lin, National University of Kaohsiung, Taiwan
- Al-Garadi Mohammed Ali Derhem, Emory University
- Diego Molla-Aliod, Macquarie University, Australia
- Saeed Salem, North Dakota State University
- Abeed Sarker, Emory University
- Elaheh ShafieiBavani, IBM Research Australia
- Hamid Soltanian-Zadeh, Henry Ford health System
- Joan Vila Francés, University of Valencia, Spain
- Da Yan, University of Alabama at Birmingham
- Jie Zheng, Shanghai Tech University, China