



CALL FOR PAPERS

The 2021 (17th) International Conference on Data Science (ICDATA)

<https://icdata.org>

July 26-29, 2021, Luxor (MGM), Las Vegas, USA

Part of CSCE'21

<https://www.americancse.org/csce2021>

Call for Papers

Special Session on Data Science Applications in Public Health and Biomedical Informatics to Address COVID-19 Crisis

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Thematic Calls:

In the light of COVID-19 pandemic, humanity has seen the rise of an unprecedented crisis in both physical and mental health throughout the world. The impact of the current pandemic will continue to persist for several years. Thus, it is imperative that researchers use available sources to catalogue these crises including the lessons that have been learnt from it.

There is a wealth of data regarding both the Coronavirus transmission and health intervention, such as current pandemic policies, public responses in social media, research papers - all available online. This data is being analyzed by data scientists and public health experts alike throughout the world. Still, there are thousands of questions that are perplexing scientists. For example, the higher rate of infection in some of the higher human development index (HDI) countries despite maintaining low mobility as compared to some of the lower HDI countries in the global south. Surprisingly, although vaccination started since last February, some of the lower HDI countries, such as Bangladesh and India that had maintained lower transmission rates during the winter 2020, are now on the verge of a third wave in March 2021. So we solicit your participation in the conference with your research work on pandemic modeling, and health intervention to address those challenges.

The COVID-19 is causing a huge damage to mental health in general. Analyzing billions of publicly shared tweets on social media networks, it has been observed that the frequency of the word “anxiety” is the highest among all the symptoms people are concerned about during the pandemic. People are facing uncountable socio-economic challenges that can be stressful, overwhelming, and cause strong emotions in both adults and children. On one hand, COVID-19 health interventions such as social distancing and isolations are reducing the spread of the virus, but on another hand these new normals are making people lonely that cause the increase of stress and anxiety. Thus it is very important to research the methods that can help to cope with stress in a healthy way so that our communities become more resilient. Hence, we also expect data scientists to participate in our conference with research papers on analyzing the wealth of available data to interpret the current public health situation and possible intervention design using technology.

In addition to hundreds of thousands of lives lost because of COVID-19, many unfortunate events took place throughout the world due to the spread of fake news, especially in rural areas. A few examples of misinformation include drinking the juice of Thankuni herbs (*Centella Asiatica*) that can cure COVID-19. Besides, there are hundreds of rumors regarding the Government subsidies on house rent, utility bills, and postponement of bank loans during pandemic. Astonishingly, some self-proclaimed religious leaders claimed in public meetings that coronavirus does not infect the pious people. So, instead of using masks and maintaining social distance, people should pray and ask for forgiveness and deliverance from the wrath of God. In addition, the spread of fake news about COVID-19 and vaccination increased severely from last year. People have concerns regarding different types of vaccines, and there are hundreds of rumors on the differences of different vaccinations and their side effects on health. Thus, we request application of Data Science as well as Data Mining in this area to mitigate the adversities of information disorder, or dis-infodemic in social media.

Topics of interest

We solicit for your participation in the special session by submitting research papers on innovative data analytics techniques in the area of public health and biomedical informatics for tracking and mitigating the impact of COVID-19 crisis in different parts of the world. We expect to receive papers that are highly relevant to the current pandemic, including but not limited to the following areas:

- Infectious Disease Epidemiology
- Modeling of COVID-19 Pandemic
- Impact of Social Distancing, Isolation and Quarantine
- Lessons Learned for COVID-19 Symptom Checker
- Different Health Interventions and Outcomes
- Impact of Social Media for Health Intervention
- Modeling for Vaccination Distribution throughout the World
- Vaccination and Its Impact on COVID-19 Pandemic
- Mis- and Dis-information During Pandemic
- Ensuring Equitable Access to Healthcare Information
- Addressing Rise of Ethnic Hate Speech in Social Media
- Measuring the Impact of COVID-19 on Different Ethnic Group
- Addressing Mental Health Issues during COVID-19
- Addressing Mental Growth of Children during COVID-19
- Fighting COVID-19 Anxiety using Technology
- IoT for Tracking Physical Reactions (Cough, Headache, Sleep)
- Reaching the Marginalized People using ICT
- Ensuring the COVID-19 Healthcare for Refugees
- Digital Public Health Technologies for COVID-19
- Mobile Informatics for Collecting Health Data
- Proximity and Contact Tracing for Coronavirus
- Ethical Issues for Collecting and Managing COVID-19 Data
- Crisis Management of COVID-19
- Impact of COVID-19 on the Education Sector
- Online Education Tools for Children

Submission: All manuscripts should be submitted via the standard online submission process for ICDATA conference. Please have a look at the [ICDATA website](#) and in particular at the info on submissions. During the submission process, please select the track: '**DSC19 - Special Session (Data Science Applications ... to Address COVID-19 Crisis)**'.

Publication & Indexation: ALL ACCEPTED PAPERS will be published in the corresponding proceedings by Publisher: Springer Nature - Book Series: Transactions on Computational Science & Computational Intelligence <https://www.springer.com/series/11769>. The indexation is subject to Springer science indexation which includes: [online Springer Link](#), [Scopus](#), [SCI Compendex](#), [EI Compendex](#), [EMBASE](#), [Web of Science](#), [Inspec](#), [ACM digital library](#), [Google Scholar](#), [EBSCO](#), and others.

Date and Venue: The special session will be held at the ICDATA'21, July 26–29, 2021 at the Luxor (MGM) in Las Vegas, Nevada, USA.

For infos on presentation modes w.r.t. Covid-19, please have a look [here](#).

Programme Committee for this Special Session:

- Dr. Afroza Sultana, Teradata, USA
- Dr. Ashraful Hoque, University of Helsinki, Finland
- Dr. Farida Chowdhury, Shahjalal University of Science and Technology, Bangladesh
- Hasib Ahsan, PhD Candidate, IT University of Copenhagen, Denmark
- Dr. Javed Morshed, University of Latrobe, Australia
- Dr. Jesmin Jahan Tithi, Intel, USA
- Dr. Md Enamul Hoque, Shahjalal University of Science and Technology, Bangladesh
- Dr. Md Saif Al Haque, MD, AdventHealth Orlando, USA
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- Dr. Nova Ahmed, North South University, Bangladesh
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- Dr. Shahidul Islam, California State University, Monterey Bay, USA
- Dr. Shariful Islam, North South University, Bangladesh
- Dr. Shebuti Rayana, SUNY at Old Westbury, USA
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- Dr. Sudipta Kar, Amazon, USA
- Dr. Syed Ishtiaque Ahmed, University of Toronto, Canada
- Dr. Yeshim Iqbal, New York University, USA
- Zafar Ahmad, PhD Candidate, Stony Brook University, USA

Questions: In case of further questions or assistance, please contact the special session organizer via mamin17@fordham.edu or the ICDATA conference organizers via chair@icdata.org.