DoSCI-2021
International Conference/Doctoral Symposium on Computational Intelligence

Organized by Institute of Engineering & Technology, a constituent college of Dr APJ Abdul Kalam Technical University Lucknow, India
On 06 March 2021.

************** CALL FOR PAPERS **************

SPECIAL SESSION ON
Computational Intelligence for Healthcare

SESSION ORGANIZERS:
Dr. Gabriella Casalino, University of Bari, Italy, gabriella.casalino@uniba.it
Prof. Giovanna Castellano, University of Bari, Italy, giovanna.castellano@uniba.it
Dr. Katarzyna Kaczmarek-Majer, Polish Academy of Sciences, Poland, k.kaczmarek@ibspan.waw.pl

SESSION DESCRIPTION:
In the last few decades, a digitization process has affected various aspects of daily life, and the healthcare sector is one of the fields mostly affected by this digital transformation. Digital Health is a new multi-disciplinary domain aiming at using information and communication technologies to support health-related challenges. Digital health focuses on both hardware (e.g., comprehensive systems) and software aspects. Large quantities of digitized data are daily generated and become a valuable resource. Moreover, the advent of wearable devices, smartphones, virtual reality and intelligent objects brings more and more scenarios to Digital Health, creating new paradigms such as pervasive monitoring and personalized medicine. Artificial Intelligence, and in particular Computational Intelligence (CI) techniques have proven to be very successful in extracting meaningful knowledge from health-related data to support the functioning of the healthcare system, e.g., improve the quality of life, diagnosis, monitoring or treatment. Computational Intelligence encapsulates advanced information processing consisting of nature-inspired computational methodologies such as, e.g., Fuzzy Systems, Neural Networks, Evolutionary Systems, Probabilistic Methods. CI places emphasis on the development of real world applications.

This Special Session will publish original research, overviews, and applications of Computational Intelligence for Healthcare.

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Fuzzy logic and fuzzy models for Healthcare
- Artificial neural networks for Healthcare
- Evolutionary computing for Healthcare
- Probabilistic models for Healthcare
- Modeling Uncertainty in Healthcare
- Wearable, outdoor and home-based Devices and Applications
- mHealth or eHealth Systems and Applications
- Applications of CI (including Feature engineering, Data Mining) in Healthcare
- Big data in Healthcare
- Omics data Analysis
- Internet of Things (IoT) and Fog Computing in Healthcare
- Ambient Assisted Living Systems and Applications
- Remote diagnosis, patient management, telemedicine
- Health-related Data Management
- Augmented reality and virtual reality
- Edge Computing for HealthCare
- Innovation in Healthcare Technology
- Advances in sensor devices for biomedical monitoring
- Energy management and optimisation issues in biomedical devices and networks
- Pervasive wireless systems for health applications

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **Computational Intelligence for Healthcare** *on or before* **December 31, 2020**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://dosci-conf.com/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify **Computational Intelligence for Healthcare** at the top (above paper title) of the first page of your paper.

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