



## **Brain Informatics 2021 Conference Workshop on Computational Intelligence in Healthcare (BI-CIH 2021)**

**September 17, 2021, Padova, Italy (Both **online** and **offline** modes)**

### **Introduction**

Computational Intelligence (CI) is the theory, design, application and development of biologically and linguistically motivated computational paradigms. These typically include fuzzy systems, artificial neural networks, evolutionary algorithms, and probabilistic methods which have recently emerged as promising tools for the development and application of intelligent systems for brain and mental health centric healthcare research. CI-based systems can generalize and evolve in a data-driven manner to changes in the environment while taking into account the uncertainty and imprecision characterizing health related data and processes. This workshop aims to provide a unique platform for researchers and practitioners to present and share their recent research on intelligent healthcare systems adopting computational intelligence techniques. Participants are invited to submit papers in all related areas of computational intelligence for healthcare systems, particularly applications and research that address the emergent COVID19 related issues.

[\[On-line Submission\]](#)

### **Topics of Interest**

Research topics of interest include, but not limited to:

- Computational Intelligence for Brain and Mental Health
- Artificial Neural Networks and Deep learning for Healthcare Systems
- Evolutionary Computation and Fuzzy Health Systems
- Probabilistic Models for Health Information Processing
- Big Data Analytics for Brain Informatics
- Artificial Intelligence in Personalized Medicine
- Biomedical and Genetic Information Processing
- Pattern Recognition and Precision Diagnosis

Submission and Publication [\[Enter\]](#)

Similar to the main conference, there are 2 types of paper submissions that are possible:

**Type I** : Full Paper Submissions. Papers need to have up to 10 pages in LNCS format using our online submission system. All full-length papers accepted will be published by Springer as a volume of the series of LNCS/LNAI.

**Type II** : Abstract Submissions. Abstracts have a word limit of 500 words. Experimental research is particularly welcome. Accepted abstract submissions will be included in the conference program and will be published as a single, collective proceedings volume.

Workshop and Special Session full papers will be published at the same **BI proceedings at the Springer-Nature LNAI Brain Informatics book series**.

Accepted full papers will be selected to publish in a special issue at the Springer Open Access **Brain Informatics Journal (Springer-Nature)** upon significant revision.

#### **Workshop Chairs**

- Tianhua Chen, Department of Computer Science, University of Huddersfield, UK.  
Email: T.Chen@hud.ac.uk
- Pan Su, School of Control and Computer Engineering North China Electric Power University, China
- Archie Khuman, Faculty of Computing, Engineering and Media, De Montfort University, UK
- Lu Chen, Institute of Big Data Science and Industry, Shanxi University, China

#### **Workshop Schedule**

- Submission deadline: 30 April, 2021
- Review deadline: 30 May, 2021
- Acceptance deadline: 1 June, 2021
- Camera ready & Registration: 15 July, 2021
- Program ready: 17-19 September, 2021