

4th International Conference on Machine Intelligence and Signal Processing (MISP2022), March 12-14, 2022

(https://misp2022.nitrr.ac.in/)

Organized by

Department of Computer Science and Engineering, National Institute of Technology Raipur, India

1. Title of the Special Session: Computational Intelligence and its application in medical diagnosis

2. Details of Session Chair and Co-Chair

Name (Session Chair):

Dr. Arpit Bhardwaj

Associate Professor, Department of Computer Science and Engineering, Mahindra University, Hyderabad (Telangana), India

Co-Chair:

Dr. Dheeraj Rane

Associate Professor, Department of Computer Science and Engineering, Indore Institute of Science and Technology, Indore (M.P.), India

3. Aims & Scope (Theme of Session)

This special issue is focussing for novel works in the area of computational intelligence and Deep Learning for medical diagnosis. Health care is one of the most important areas of concern among researchers of all countries. One of the major transformations that distinguishes the era of our life is the great availability of data sometimes unstructured and not labelled. Health care industry can leverage the difficulties and advancement of machine learning and artificial intelligence. We are looking for papers that demonstrate how the proposed approach can be applied to medicine, medically oriented human biology, and health care, usually through an experimental examination. They must also make a comparison with previous studies and address characteristics of originality explicitly.

4. Subtopics: Topics include (but are not limited to) following:

- Computational intelligence in bio- and clinical medicine;
- AI-based clinical decision making;
- Medical knowledge engineering;
- Knowledge-based and agent-based systems;
- Intelligent and process-aware information systems in healthcare and medicine;
- Natural language processing in medicine;
- Data analytics and mining for biomedical decision support;
- New computational platforms and models for biomedicine;
- Intelligent exploitation of heterogeneous data sources aimed at supporting decisionbased and data-intensive clinical tasks;
- Intelligent devices and instruments;
- Automated reasoning and meta-reasoning in medicine;

- Machine learning in medicine, medically-oriented human biology, and healthcare;
- Deep learning in medicine
- AI and data science in medicine, medically-oriented human biology, and healthcare;
- AI-based modelling and management of healthcare pathways and clinical guidelines;
- Models and systems for AI-based population health;
- AI in medical and healthcare education;
- Methodological, philosophical, ethical, and social issues of AI in healthcare, medically-oriented human biology, and medicine.

Contacts: All inquiries should be directed to the attention of Session Chair/Co-Chair:

E-mail ID: arpit.bhardwaj@mahindrauniversity.edu.in / arpitgsits17@gmail.com

Phone: +918878853111

Submission Guidelines for Authors

- ❖ Prospective authors are invited to submit original research work that falls within the scope of the session. All submissions will be thoroughly peer-reviewed by experts based on originality, significance, and clarity.
- Only papers presenting novel research results or successful innovative applications will be considered for publication in the conference proceedings.
- ❖ Authors are requested to submit their Manuscripts through the Easy Chair System. https://easychair.org/my/conference?conf=misp2022#
- ❖ The paper must be in Springer format and of size of 12-15 pages. Springer Author's Guidelines
- ❖ Please visit conference website for paper format and other details: https://misp2022.nitrr.ac.in/#
- ❖ All accepted and registered papers under MISP 2022 will be submitted for possible publication in Scopus Indexed Springer Book Series (approval pending).

Springer Policy on Plagiarism

- ❖ Authors are requested to kindly restrict from plagiarism in any form. Authors should submit their original and unpublished research work not under consideration for publication elsewhere.
- ❖ Papers found to be plagiarised during any stage of review shall be rejected.
- ❖ As per the copyright transfer agreement, Authors are deemed to be individually and collectively responsible for the content of manuscripts published by them.
- ❖ Hence, it is the responsibility of each author to strive for the highest ethical standards with respect to plagiarism.

Special Session Timeline

Special Session Submission Deadline: **15**th **January 2022**Acceptance Notification (1st round): 30th January 2022
Acceptance Notification (2nd round): February 15th, 2022
Camera Ready Submission: 20th February 2022
Registration Due: 25th February 2022
Conference Date: 12th March – 14th March 2022.