

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: Signal and Image Processing

2. Details of Session Chair and Co-Chair

Name (Session Chair): Prof. M.K. Bhuyan;

Email Id: mkb@iitg.ac.in Contact Number: 9435051060

Name (Session Co-Chair): Dr. Amit Vishwakarma.

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3. Aims & Scope (Theme of Session)

The set of projects in signal and image processing concerns various approaches to reconstructing uniform and non-uniform samples. Among other applications, our results have been applied to digital pre-compensation for faulty D/A converters. In some contexts, DACs fail in such a way that specific samples are dropped.

In the general area of signal and image processing algorithms, we have been investigating several areas of mathematics, such as geometric algebras and frame theory, to develop new algorithms with broad application. We are also currently exploring various classes of nonlinear signal processing.

Distributed signal and image processing represent another vital area of our research. A significant trend in signal processing technology is the increasing deployment of distributed signal processing systems, i.e., a communication network separates signal measurement, storage, and processing capacity.

Biological Signal and Image Processing and—in particular—issues and opportunities at the biology and signal processing interface represent another necessary research thrust in DSPG. Our research focuses on introducing systematic engineering principles to model the information processing in biological cells at different levels of abstractions to understand the algorithms implemented by the signalling pathways that perform the processing.

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

- Bayesian and statistical machine learning.
- Natural language analytics.
- Time series analytics

- Reconstruction of signals from uniform and nonuniform samples;
- Signal and image processing algorithms;
- Distributed signal and image processing;
- Biological signal and image processing;
- Relational and structured learning;
- Online learning and learning from non-stationary distributions;
- Machine learning;
- Deep learning;

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

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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. <u>Springer Author's</u> <u>Guidelines</u>
- 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).

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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.