



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

(<https://misp2022.nitr.ac.in/>)

Organized by

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

1. Title of the Special Session:

Recent Advances in AI, Machine Learning and Deep Learning Models for Signal Processing Applications

2. Details of Session Chair and Co-Chair

Name (Session Chair): Dr. Ghanapriya Singh

Designation: Assistant Professor, National Institute of Technology Uttarakhand

Email Id: ghanapriya@nituk.ac.in

Contact Number: 9068289740

Name (Session Co-Chair): Mr. Vishwanath Bijalwan

Designation: Assistant Professor, Institute of Technology, Gopeshwar, Uttarakhand

Email Id: vishwanath.bijalwan@gmail.com Contact Number: 8126937623

3. Aims & Scope (Theme of Session)

Over the last decade, the entire discipline of signal processing has faced new challenges and paradigm shifts as a result of huge improvements in computational performance in hardware and an explosion in the number of internet-connected devices. Massive amounts of data collected through ubiquitous reality must be evaluated and processed in order to generate valuable and meaningful information.

Machine (deep) learning-based artificial intelligence (AI) delivers unique insights into the domain of signal processing. As a result, the signal processing community must create novel methodologies, methods, theories, and tools for analyzing and accounting for generated data volumes.

The Special Issue seeks submissions on topical subjects in signal processing for artificial intelligence and machine learning, including deep learning. The Special Issue's purpose is to bring together current high-quality works in artificial intelligence and machine learning, including deep learning, to highlight significant breakthroughs in the signal processing areas covered by the journal and to give state-of-the-art evaluations in developing domains.

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

- Signal processing and machine learning for sensor networks;
- Neural networks and deep learning;
- Information-theoretic learning;
- Graphical and kernel models;
- Signal detection, pattern recognition and classification;
- Machine learning for big data;
- Dictionary learning, subspace, and manifold learning;
- Semi-supervised and unsupervised learning;
- Active and reinforcement learning;
- Learning from multimodal data;
- Resource-efficient machine learning;
- Cognitive information processing;
- Bioinformatics applications;
- Biomedical applications and neural engineering;
- Speech and audio processing applications;
- Image and video processing applications;
- Intelligent multimedia and web processing;
- Communications applications;
- Other applications including social networks, games, smart grid, security, and privacy.

5. Technical Programme Committee(s) for special session: (TPC should contain at least 3-5 active researchers of specialized area)

1. Dr. Kala S., Indian Institute of Information Technology Kottayam
2. Dr. Vishal Sharma, Indian Institute of Technology Kanpur
3. Mr. Vivek Kumar, National Institute of Technology Uttarakhand
4. Dr. Piyush Kumar Shukla, Rajiv Gandhi Technological University
5. Dr. Rinki Gupta, Amity University
6. Dr. Shubra Dixit, Amity University
7. Dr. C. Kishore K Reddy, Stanely College Engineering and Technology for Women
8. Dr. Manoj Prabhakaran Kumar, Amrita Vishwa Vidyapeetham
9. Mr. Bosubabu Sambana, Raghu Engineering College Vishakhapatnam
10. Dr. Dolly Shukla, Shri Shankaracharya Technical Campus Bhilai

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

E-mail ID: ghanapriya@nituk.ac.in

Mobile No.: 9068289740

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.nitr.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

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- ❖ As per the copyright transfer agreement, Authors are deemed to be individually and collectively responsible for the content of manuscripts published by them.
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Special Session Timeline

Special Session Submission Deadline: **15th 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.