

**Special Session on
Medical Image and Underwater Optical Image Analysis using Machine Learning &
Deep Learning Models
at
The International Conference on Intelligent Systems Design and Applications
(ISDA 2022)
on
World Wide Web
December 12-14, 2022**

<http://www.mirlabs.org/isda22/>

Objectives and Scope

In the last few years, the technologies related to imaging, ocean imaging, medical imaging, video processing, computer graphics, 3D modelling and multimedia have been greatly employed in various application areas such as detection, image analysis, image compression, face recognition etc. The continuous development of these technologies leads researchers to propose new methodologies and applications in this field. Moreover, recent image-processing and machine learning algorithms give the opportunity to process large datasets as well as images, in order to extract information and develop new analysis procedures. Deep Learning is the future, big as well as demanding things today. They cover not only Information and communication technology, but also all kinds of systems in our society, including business, finance, industry, manufacture, management, and environment. DL is going to be game changer for many applications areas, now it is going to be applied in various research fields.

Aim of this special session is to bring together researchers from different fields of expertise to discuss how deep learning could help analysis, modelling, simulation, and application in the Interdisciplinary domains of several cutting edge technologies architecture used in the various medical industry and throws light on future implementation and developments. Working in this technology with respect to medical areas and their impact.

Subtopics

The topics include, but are not limited to:

- Image Analysis and Recognition using deep learning methods.
- Active Machine Learning and Deep Learning Applications.
- Clustering, Classification and Regression Methods for Medical Image and Underwater Optical Image Processing.
- Intelligent Assessment of Speech using Excitation source information and Deep Neural Networks.

- Application of Optimization Techniques in Medical field.
- Underwater Optical Image enhancement, restoration, analysis and super resolution reconstruction using Deep Learning approaches.
- Image segmentation, retrieval, classification and fusion techniques for

Medical Image and Underwater Optical Image Processing.

- Multi-modal approaches for Medical Image and Underwater Optical Image Processing

Paper Publications

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (Indexed in SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago)
<https://www.springer.com/series/15179>
- Papers maximum length is 10 pages
- Papers must be formatted according to Springer format (Latex/word) available at:
<https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324>

Important Dates

Paper submission due: September 30, 2022

Notification of paper acceptance: October 31, 2022

Registration and Final manuscript due: November 15, 2022

Conference: December 12-14, 2022

Special Session Chairs

- S. Amutha, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, India.
- B. Surendiran, Department of Computer Science and Engineering, National Institute of Technology Puducherry, India.

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