

ICIITCEE-2023
BNM Institute of Technology, Bengaluru
27th-28th Jan 2023

******* Special Session Proposal *******

TITLE OF THE SESSION

Medical Image and Underwater Optical Image Processing using Deep Learning

SESSION ORGANIZERS:

Dr. S. Amutha, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai

Dr. B. Surendiran, Department of Computer Science and Engineering, National Institute of Technology, Pondicherry

Dr. N. Sangeetha, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai

Dr. T. Manimegalai, School of Computer Science and Engineering, Vellore Institute of Technology, Chennai

OBJECTIVE OF THE SPECIAL SESSION:

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.

TOPICS OF THE SPECIAL SESSION:

Topics to be discussed in this special session include (but are not limited to) the following:

- Image Analysis using deep learning
- Image Segmentation using deep learning
- Image Recognition using deep learning

- Image Processing Applications
- Active Machine Learning and Machine Learning Applications
- Clustering, Classification and Regression Methods
- Supervised, Semi-Supervised and Unsupervised Learning,
- Unsupervised Pre-trained Networks (UPNs)
- Convolutional Neural Networks (CNNs)
- Recurrent Neural Networks

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