Theme 5: Application of AI and ML in Earth Sciences

Venue: School of Earth Sciences (CESS Lab)

24.11.2022 (Thursday)

Sr.No	DELEGATE TYPE	Name	Title	Time slot	Remark
1	Invited Talk	Suryachandra A. Rao and Collaborators	Artificial intelligence and machine learning in earth system sciences with special reference to climate science and meteorology in South Asia	11.30 AM - 12.00 PM	

Session 1

Name of The Chair Person / Co-Chair Person / Rapporteur		Signature
Chair Person	Suryachandra A. Rao	
Co-Chair Person	U.L.Sahu	
Rapporteur	Mr. PYDI RAJU YALAMANCHI	

Sr.No	DELEGATE TYPE	Name	Title	Time slot	Remark
2	Academician/ Scientist	Nagaraja Kumar Masuluri, Pavan kumar J, Naga Swetha and Udaya Bhaskar TVS	AL/ML based interpolating techniques for deriving gap free satellite data sets for operational oceanography services	12.00 PM - 12.30 PM	
3	Academician/ Scientist	Pavan Kumar Jonnakuti and TVS Udaya Bhaskar	Machine Learning-based approach for assessment and correction of sensors degradation. A case study of salinity data from Argo floats	12.30 PM - 1.00 PM	
4	Academician/ Scientist	U.L.Sahu, V.M.Wagh, D.B.Panaskar and Ajay Kadam4	GIS and fuzzy logic ranking based approach for systematic assessment of multi metrics influencing the aquifer capabilities in and around Asna River watersheds, Marathwada province, Maharashtra, India	1.00 PM - 1.30 PM	

			LUNCH BREAK (1.30 - 2.30 PM)		
5	Invited Talk	Dr. SATISH MAURYA	Detail studies of the cratonic lithosphere from the 3D shear waves velocity models using an Unsupervised K-means clustering algorithm	2.30 PM - 3.00 PM	Remark
			Session 2		
	Name of The Chair Person / Co-Chair Person / Rapporteur			**Signature**	
	Chair Person		Dr. SATISH MAURYA		
	Co-Chair Person		Mr. AKASH . GOYAL		
	Rapporteur		Krishna Kumar S		
6	Academician/ Scientist	Mr. AKASH . GOYAL	Kharif crop (Red gram) classification and mapping using SAR data and Machine Learning Algorithms	3.00 PM - 3.20 PM	
7	Academician/ Scientist	Dr. CHANDRA PRAKASH DUBEY	Application of machine learning in sedimentary basin	3.20 PM - 3.40 PM	
8	Research Scholar	Mr. BIJAYANANDA DALAI	Deep learning-based de-noising of seismic data without supervision	3.40 PM - 3.55 PM	
9	Research Scholar	Mr. PYDI RAJU YALAMANCHI	Shear wave velocity (Vs) prediction by using different Machine Learning Techniques and Compression with empirical Relationships.	3.55 PM - 4.00 PM	
10	Research Scholar	Krishna Kumar S, Syed Ashfaq Ahmed, Jyothika Karkala and Sanjay Kumar	Assessing the relationship between land surface temperature and land use land cover changes using geospatial technique in Vedavathi river basin, Karnataka	4.00 PM - 4.15 PM	
11	Academician/ Scientist	T.H.Mujawar, M.L. Aamalawar	IoT Based Advanced Air Pollution Monitoring System	4.15 PM - 4.30 PM	

			TEA BREAK (4.30 - 5.00 PM)		
12	Student (UG/PG)	Mr. ASWIN RAJ G	A TIME SERIES ANALYSIS ON THE IMPACT OF CLIMATE CHANGE ON RICE YIELD IN TAMILNADU.	5.00 PM - 5.20 PM	
13	Student (UG/PG)	Mr. SYED IMADUDDIN	Detection of brick kilns using multi-spectral bands of Sentinel-2 Imagery	5.20 PM -5.40 PM	