



First International Conference, NUclearCSE-2022

The name **NUclearCSE-2022** has been derived from a few Key Words like: **N**eural networks, **U**nsupervised machine learning, **C**loud computing and Hyperscale Multi-Cloud Technology, **E**dge computing and 5G & beyond, **A**I-powered automation, **R**emote sensing imagery and applications, **C**yber threat intelligence, **S**tatistical inference, **E**lectronic devices on intelligent IoT applications.

NUclearCSE-2022 – aims to bring together leading academic scientists, researchers, and Ph.D. scholars from different fields to exchange and share their experiences, learning, outreach, and research results of their respective fields. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in their fields. With its high quality, it provides an exceptional.

This conference will seamlessly cover: Cybersecurity, NextGen Networks & Edge Computing, Data Science & Artificial Intelligence, Geospatial Information and GIS, AI-powered automation and IoT. The Invited Speakers are:

- ❑ **Prof. Sugata Mitra:** Former Professor, Newcastle University, UK. Chief Scientist, and Emeritus Professors of NIIT University.
- ❑ **Prof. Rajeev Shorey:** CEO, University of Queensland - IIT Delhi Academy of Research (UQIDAR) and former President of NIIT University.
- ❑ **Prof (Dr) Koo Voon Chet:** Professor, Engineering and Technology, Multimedia University, Malaysia. [Radar Technology, Microwave Remote Sensing].
- ❑ **Dr. Rathi Dasgupta:** Senior Vice President, Intelliswift, Chicago, Illinois, USA. [AI and Machine Learning].
- ❑ **Dr. Hari Shanker Srivastava:** Scientist/Engineer - SG, & Group Head, PPEG, IIRS (Indian Space Research Organization, Dehradun).
- ❑ **Dr. M.B. Rajani:** Professor, National Institute of Advanced Studies (NIAS), Bangalore. Founder member of NU GIS team, Fellow of Nalanda University, Guest Faculty of IIT Gandhinagar.

All selected papers will be considered for publication in: **AJET (UGC Care), Special Issue:** ISSN:2348-7305.

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Dr. Shweta Malwe,
Dr. Neha Tiwari
Dr. Kumar Nitesh
Dr. Thota Sivasankar
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All times are in Indian Standard Time (IST) - UTC +0530

Day	Date	Time	Programme	Title	
Day 1	Thursday January 20 2022	09:00 - 09:03	Inauguration with Saraswati Vandana		
		09:05 - 09:20	Inaugural Address: Shri Rajendra S. Pawar , Founder, NIIT University		
		09:20 - 09:30	Address by Prof. Rajesh Khanna , President, NIIT University	Research Philosophy @ NU	
		09:32 - 09:35	Introduce Prof. Sugata Mitra by Dr. Neha Tiwari		
		09:35 - 10:35	Invited Talk by Prof. Sugata Mitra, VOT: Prof. Parimal Mandke	<i>Title: "Synthetic Psychology: putting minds into machines"</i>	
		10:45 - 13:00	Session 1: Electronics and Communication Engineering		
			Introduce Chair & Co-chair		
			Chair: Dr. Heng-Siong Lim, PhD, PEng, CEng, Deputy Director Research Management Centre, Professor Multimedia University, Malaysia. Co-Chair: Prof. Shivendra Nath Sharan, Area Director ECE, NU		
		10:45 - 11:00	Paper Presentation #01	Paper Id=1 : Sansevieria Plant: Plant Base Cell (PBC) to power up IoT sensors nodes	
		11:05 - 11:20	Paper Presentation #02	Paper Id=9 : LoRa Based Vehicular Communications	
		11:25 - 11:40	Paper Presentation #03	Paper Id=18 : Relative Result Analysis of SPV Tracking System on Simulink Platform	
		11:45 - 12:00	Paper Presentation #04	Paper Id=19 : Renewable Energy from Living Plants to Power IoT Sensor for Remote Sensing	

Day	Date	Time	Programme	Title	
Day 1	Thursday January 20 2022	12:05 - 12:20	Paper Presentation #05	Paper Id=7 : Evolution of Display Technology	
		13:00 - 14:00	Break		
		14:00 - 14:03	Introduce Prof. Rajeev Shorey by Dr. Neha Tiwari		
		14:03 - 15:00	Invited Talk by Prof. Rajeev Shorey, VOT: Prof. Eswaran Narasimhan	<i>Title: Recent Investigations in Machine Learning & Edge Computing</i>	
		15:08 - 15:10	Introduce Prof. Koo Voon Chet by Prof. Ajay Kumar Singh		
		15:10 - 16:10	Invited Talk about by Prof. Koo Voon Chet, VOT: Prof. Ajay Kr. Singh	<i>Title: "Remote Sensing 4.0"</i>	
		16:15 - 17:15	Session 2: Electronics and Communication Engineering		
			Introduce Chair & Co-chair		
			Chair: Prof. Debashis Ghosh, IIT Roorkee Co-chair: Prof. Ajay Kumar Singh		
		16:15 - 16:30	Paper Presentation #08	Paper Id= 26 :A Proposed Security System Using Object Proposals via Superpixel Segmentation	
		16:35 - 16:50	Paper Presentation #09	Paper Id=29 :An Autonomous Virtual Tour Guide System for Tourists	
		17:10 - 17:15	Closing Remarks		
Day 2	Friday January 21 2022	09:00 - 09:30	Invited Talk by Dr. M.B. Rajani: Professor, National Institute of Advanced Studies (NIAS), Bangalore. Founder member of NU GIS team, Fellow of Nalanda University, Guest Faculty of IIT Gandhinagar. VOT: Dr. Thota Sivasankar		
		09:30 - 10:00	Special Session by Founder Members or Leadership, NIIT University		
		10:00 - 13:00	Session 3: Geospatial Information and GIS		

Day	Date	Time	Programme	Title
Day 2	Friday January 21 2022	10:00 - 10:05	Introduce Chair & Co-chair	
			Chair: Dr. George Philip, Retd. Scientist-G (Group Head), Wadia Institute of Himalayan Geology, India Co-chair: Dr. Abhrankash Kanungo, Scientist-SD, APSAC, Andhra Pradesh, India	
		10:05 - 10:20	Paper Presentation #01	Paper Id=13 :Active and Paleo floodplain mapping of Palam Cauvery using Geospatial Technology
		10:25 - 10:40	Paper Presentation #02	Paper Id=12 :Quantitative Morphometric Assessment of Bhima Lower sub-basin using Remote Sensing and GIS
		10:45 - 11:00	Paper Presentation #03	Paper Id=31 :Low-cost aerial mapping and accuracy assessment using UAV internal parameters for Image georeferencing in undulating terrain
		11:05 - 11:20	Paper Presentation #04	Paper Id=16 :Mapping of Sittampundi Anorthosite Complex (SAC) in Southern Granulite Terrain (SGT), India with ASTER and Sentinel-2A data
		11:25 - 11:40	Paper Presentation #05	Paper Id=23 :Estimation of glacier surface velocity of Drang-drung glacier by DInSAR technique using Sentinel-1 SLC SAR data
		11:45 - 12:00	Paper Presentation #06	Paper Id=22 :Identifying Highly Vulnerable Mosquito Breeding Sites Using Drone Based Aerial Survey
		12:05 - 12:20	Paper Presentation #07	Paper Id=15:GIS Based Morphometric Characteristics of Kadavananar River Basin in Tamil Nadu, India
		12:25 - 12:40	Paper Presentation #08	Paper Id= 4 : Rainfall-Runoff Modeling of Upper Mountainous Riverine Watershed Area in Uttarakhand
		12:45 - 13:00	Paper Presentation #09	Paper Id=11: Geospatial Technologies in the extraction of Groundwater Potential Zones: A case study of Nandyal Mandal, Kurnool District of Andhra Pradesh, India
		13:05 - 13:10	Closing Remarks	
		13:15 - 14:00	Break	
		14:00 - 14:03	Introduce Prof. Dr. Hari Shanker Srivastava by Dr. Thota Sivasankar	
		14:03 - 15:00	Invited Talk by Dr. Hari Shanker Srivastava, VOT: Maj. Gen A K Singh	<i>Title: Fundamentals and Applications of Radar Remote Sensing</i>

Day	Date	Time	Programme	Title	
Day 2	Friday January 21 2022	15:05 - 17:45	Session 4: Geospatial Information and GIS		
			Introduce Chair & Co-chair		
			Chair: Dr. Hari Shanker Srivastava, Scientist-SG & Group Head, Indian Institute of Remote Sensing (IIRS), ISRO, India Co-chair: Dr. Mustafa Üstüner, Assistant Professor, Department of Architecture and City Planning , Artvin Coruh University, Turkey		
		15:05 - 15:20	Paper Presentation #10	Paper Id=05 : Quantifying Spatio Temporal Changes in Coastal Built-Up Area of South Goa Based on Landsat Imageries Using Google Earth Engine	
		15:25 - 15:40	Paper Presentation #11	Paper Id=28 :Vegetation indices based farm-level mustard crop classification for the analysis of cropping pattern in Rabi 2021-22 and change in crop trend from 2019 to 2021 for Kota District Rajasthan	
		15:45 - 16:00	Paper Presentation #12	Paper Id=17 :Detection of Spatio-temporal Changes in Palar-Porundalar Dam, Dindigul District, Tamil Nadu, India Using Geomatics Technologies	
		16:05 - 16:20	Paper Presentation #13	Paper Id=24 :Identification of Land undergoing degradation using geospatial techniques: A case study of Kohima, Nagaland	
		16:25 - 16:40	Paper Presentation #14	Paper Id=3: Comparison of satellite image-based vegetation indices for extraction and mapping of litchi (Litchi Chinensis) cultivation area in Muzaffarpur district, Bihar, India	
		16:45 - 17:00	Paper Presentation #15	Paper Id=21: Demarcation of Ground Water Potential Zones using Remote Sensing and GIS Applications	
		17:05 - 17:20	Paper Presentation #16	Paper Id=25: Employment of Machine Learning Techniques for Detection of Intervening Covers in Hyperion imagery	
		17:25 - 17:40	Paper Presentation #17	Paper Id=21: Demarcation of Ground Water Potential Zones using Remote Sensing and GIS Applications	
		17:45 - 18:00	Paper Presentation #18	Paper Id=32: Mapping and Change detection of Waterbodies in the Godavari Delta using Geospatial Technology	
		18:05 - 18:20	Paper Presentation #19	Paper Id=27: Change Detection of Vegetation Cover by NDVI Technique on Radhangari Wildlife Sanctuary of Kolhapur District in Maharashtra, India	
		18:20 - 18:25	Closing Remarks		

Day	Date	Time	Programme	Title	
Day 3	Saturday January 22, 2022	09:15 - 09:18	Introduce Dr. Rathi Dasgupta by Dr. Deepika Prakash		
		09:18 - 10:15	Invited Talk by Dr. Rathi Dasgupta, VOT: Prof. Eswaran Narasimhan	<i>Title: An overview of Dimensionality Regularization and its applications</i>	
		10:15 - 10:50	Session 5: Computer Science and Engineering		
			Introduce Chair & Co-chair		
			Chair: Dr. Parimala N, Professor, School of Computer & Systems Sciences, Jawaharlal Nehru University Co-Chair: Prof. Prosenjit Gupta, Founder, Elahe Technologies, Former Bell Labs Yahoo! Max-Planck Professor of CSE, Heritage Institute of Technology and NU		
		10:15 - 10:30	Paper Presentation #01	Paper Id=14 : A Technical Analysis of Melanoma Classification Methods based on Machine Learning Algorithms	
		10:35 - 10:50	Paper Presentation #02	Paper Id=20 : Design and Development of a Fingerprint Based Exam Hall Authentication System	
		10:50 - 13:30	Break		
		13:30 - 13:35	Session 6: Computer Science and Engineering		
			Introduce Chair & Co-chair		
			Chair: Dr. Parimala N, Professor, School of Computer & Systems Sciences, Jawaharlal Nehru University Co-Chair: Prof. Prosenjit Gupta, Founder Founder, Elahe Technologies, Former Bell Labs Yahoo! Max-Planck Professor, CSE, Heritage Institute of Technology and NU		
		13:35 - 13:50	Paper Presentation #03	Paper Id=30 : Display of College Timetable and Notice Board with Auto SMS to Faculty	
		13:55 - 14:10	Paper Presentation #04	Paper Id= 33: Graph Based Extractive Summarization with Anaphora resolution	

Day	Date	Time	Programme	Title
Day 3	Saturday January 22, 2022	14:15 - 14:30	Paper Presentation #05	Paper Id= 34 : Detection of Alzheimer's Disease using CNN Architectures
		14:35 - 14:50	Paper Presentation #06	Paper Id= 35: Binary Task Offloading Model For Mobile Edge Computing Using NDN Architecture
		14:55 - 15:10	Paper Presentation #07	Paper Id=10 : GNL: GeoFencing Based Smart Outdoor Navigation and Localization
		16:00 - 16:30	Valedictory Session	
Best Paper in GIS, ECE and CSE				

The conference details with the detailed schedule are attached herewith. Following are the day-wise conference meetings links for the registration.

Day -1: https://zoom.us/webinar/register/WN_-OUoS_TcRhabhwQvWESKtQ

Day -2: https://zoom.us/webinar/register/WN_qtdSfNf7QoCkBfKLCeuy2Q

Day -3: https://zoom.us/webinar/register/WN_ha6-4OEGQIyaD8JRMZpqBw