

**International Workshop  
on  
Remote Sensing Image Analysis**

**India-Trento Program for Advanced Research (ITPAR) Phase-III**

**16 - 18 April 2016  
Indian Institute of Technology Bombay**

## **Workshop Program**

<b>16th April (Saturday)</b>
Half Day Tutorial Session on SAR Image Processing and Analysis (9:00 AM - 12:00 Noon)
<b>Lunch Break</b>
Half Day Tutorial Session on Analysis of Multitemporal Remote Sensing Images (2:00 PM – 5:00 PM)
<b>High Tea</b>

<b>17th April (Sunday)</b>		
Inauguration (9:30 AM - 9:45 AM) Prof. S. Chaudhuri and Prof. L. Bruzzone		
<b>Plenary Talk</b>		
Prof. L. Bruzzone (Univ. Trento, Italy)	Challenges and Learning Paradigms in Classification of Remote Sensing Images	9:45 AM - 10:45 AM
<b>Morning Session (Chairs : Prof. B. Demir and Prof. P. Mitra )</b>		
Prof. S. Patra (Tezpur Univ.)	Batch mode active learning techniques for the classification of remote sensing images	10:45 AM – 11:05 AM
Ms. C. Paris (Univ Trento)	Advanced method for forest parameter estimation based on multisensor remote sensing data	11:05 AM – 11:25AM
<b>Tea/Coffee Break</b>		
Mr. A. Harikumar (FBK)	Classification of conifers forest species using airborne LiDAR data	11:40 AM – 12 noon
Mr. S. De (IIT Bombay)	Deep learning for urban area classification	12 noon – 12:20 PM
Ms. Ana-Maria Ilisei (Univ. Trento)	Advanced Methods for the Analysis of Radar Sounder	12:20 PM – 12:40 PM

	Data Acquired at the Ice Sheets	
Prof. M. K. Arora ( PEC, Chandigarh)	An account of work on remote sensing image processing applications	12:40 PM – 1:00 PM
<b>Lunch Break</b>		
<b>Afternoon Session (Chairs : Prof. T. V. Ramchandra and Prof. B. K. Mohan)</b>		
Mr. D. Pirrone (FBK)	Analysis of damaged buildings in multi-temporal VHR SAR images	2.00 PM - 2.20 PM
Prof. M. Joshi (DAIICT)	Spectral Unmixing for Super-Resolution	2.20 PM - 2.40 PM
Prof. R. Navalgund (ISRO)	Indian Remote Sensing Programme: An Appreciation	2.40 PM - 3.00 PM
<b>Tea / Coffee Break + Poster 3.00 PM - 4.30 PM</b>		
<b>Round Table 4.30 PM - 6.00 PM</b>		
<b>ITPAR Meeting 6.00 PM - 7.30 PM</b>		
<b>Dinner (7:30 PM – 10.00 PM)</b>		

<b>18th April (Monday)</b>		
<b>Morning Session 1 (Chairs : Prof. P. Venkatachalam and Prof. M. Joshi)</b>		
Dr. F. Bovolo (Trento-Fondazione Bruno Kessler (FBK) )	Change Detection in Multitemporal Hyperspectral Images: Challenges and Methods	9:30 AM - 10:10 AM
Prof. B. S. Daya Sagar (ISI Bangalore)	Applications of Mathematical Morphology in Remote Sensing and Geosciences: An Overview	10:10 AM - 10:30 AM
Dr. B. Gopalakrishna (NRSC)	Satellite Stereo Image Processing	10:30 AM - 10:50 AM
Prof. O. Dikshit (IIT Kanpur)	Geoinformatics at IIT Kanpur	10:50 AM - 11:10 AM

<b>Tea/Coffee Break</b>		
<b>Morning Session 2 (Chairs : Prof. B.N. Subudhi and Prof. S. Gedam )</b>		
Prof. B. Demir (Univ. Trento, Italy)	Recent Advances on Content Based Image Remote Sensing Image Retrieval	11.20 AM – 12.00 noon
Prof. B. K. Mohan (IIT Bombay)	Analysis of High Spatial Resolution Remotely Sensed Images	12.00 noon - 12.20 PM
Ms. B. Chaudhuri (IIT Bombay)	Unsupervised image retrieval using a graph theoretic approach	12.20 PM - 12.40 PM
Mr. I. Misra (SAC Ahmedabad)	Optical Data Image Processing and Analysis	12.40 PM – 1.00 PM
<b>Lunch Break</b>		
<b>Afternoon Session (Chairs : Prof. F. Bovolo and Prof. B. S. Daya Sagar )</b>		
Mr. M. Zanetti (Univ. Trento)	Rayleigh-Rice based binary change detection in multispectral images	2.00 PM - 2.20 PM
Prof. V. P. Namboodiri (IIT Kanpur)	Machine Learning applications for remote sensing	2.20 PM - 2.40 PM
Dr. Raj Kumar (SAC, Ahmedabad)	Synthetic Aperture Radar Applications with special emphasis on RISAT-1	2.40 PM - 3.00 PM
<b>Tea / Coffee Break + Poster 3.00 PM - 4.30 PM</b>		
<b>Conclusion and Vote of thanks 4.30 PM – 5:00 PM</b>		
<b>High Tea (5:00 PM – 6:00 PM)</b>		

## **Posters**

	Name/Affiliation	Poster Title
1	Mr. Shaunak De Indian Institute of Technology Bombay	Deep Learning Classifiers for PolSAR data
2	Dr. Bharath H Aithal Indian Institute of Science	Bangalore: Green to Gray
3	Mr. Vinay S Indian Institute of Science	Urban Dynamics: Tire 1 cities of India
4	Dr. Jignesh Bhatt Indian Institute of Information Technology, Vadodara	Spectral Unmixing of Remotely Sensed Hyperspectral Imagery
5	Ms. Bindi Dave Centre for Environmental Planning and Technology University	Temporal Monitoring of SAR Polarimetric Parameters and Scattering Mechanism for Major Kharif Crops and Surrounding Land use
6	Ms. Surabhi Sohoney Dhirubhai Ambani Institute of Information and Communication Technology	Blind Inpainting and Super-resolution Using Deep-learning
7	Mr. Prathmesh Rajesh Madhu Dhirubhai Ambani Institute of Information and Communication Technology	Image Super-resolution using deep learning
8	Mr. Shridhar D. Jawak National Centre for Antarctic & Ocean Research (NCAOR)	Mutual information based customization of spectral indices for rapid geo-information extraction using WorldView-2 imagery in the cryospheric environment
9	Mr. Har Amrit Singh Sandhu PEC University of Technology	Estimation of Glacier Mass Balance using RS data
10	Ms. Sangita Zope Indian Institute of Technology Bombay	Secure Dissemination and Protection of Satellite Images
11	Ms. Kavita Mitkari PEC University of Technology	Object Based Classification for Glacier Facies Mapping using High Resolution Satellite Remote Sensing Data
12	Mr. Hanish Kumar Kathpal ICT	Object classification of remotely sensed images using deep learning
13	Mr. Arnab Muhuri Indian Institute of Technology Bombay	Snow Cover Mapping using PolSAR data

14	Mr. Anmol Jalali PEC University of Technology	Super-Resolution Mapping
15	Mr. Manoj Kumar Singh Indian Institute of Technology Bombay	Bayesian Fusion of MISR and MODIS Aerosol Optical Depth Products utilizing Error distributions from AERONET
16	Mr. Atul Annaji Nandeshwar Bharathidasan University Trichy	Remote Sensing Application for Tribal Area Development
17	Mr. Kaushal Bhardwaj Tezpur University	A PCA-SOM-SVM based technique for classification of Hyperspectral images with limited labeled samples
18	Ms. Barnali Barman Tezpur University	A PCA-SOM-SVM based technique for classification of hyperspectral images with limited labeled samples
19	Mr. M. Jocelyn Babu Amrita University	Classification of Remotely Sensed Algal Blooms along the Coast of India Using Support Vector Machines and Regularized Least Squares
20	Ms. Deepti Yadav Indian Institute of Technology Roorkee	Fusion of Hyperspectral Images with Lidar data for improved detection of targets
21	Ms. Swati Gupta Business Innovation Private Limited	Prioritization of Biodiversity Rich regions in Central and Southern Western Ghats
22	Ms. Reshma R Amrita School of Engineering	Kernel Based Hyperspectral Image Classification with Denoising and Dimensionality Reduction
23	Mr. Siddhartha Arora Delhi Technological University	Performance Analysis and Enhancement of Image Tiling Module
24	Ms. Varinder Saini Indian Institute of Technology Roorkee	Role of image transformations in assessing the impact of coal mining on vegetation
25	Ms. Asmita Gupta Devi Ahilya Vishwavidyalaya Indore	Estimating the effect of Polarization Orientation angle shift on Fully Polarized TerraSAR-X data
26	Mr. Siddhartha Arora Delhi Technological University	Small Scale Simulator of an Internet of Things (IoT)
27	Mr. P. Dinagara Pandi VIT University	Analysis of Landscape Pattern over Pennar basin using NDVI and NDWI

28	Mr. Siddharth Mahajan Devi Ahilya Vishwavidyalaya Indore	Identification and Delineation of Open Cast Mine boundaries using SAR data
29	Ms. Deepali Shrivastava Devi Ahilya Vishwavidyalaya Indore	Automated Endmember Extraction Techniques
30	Ms. Ankita Khatri PEC University of Technology, Chandigarh	Application Of Various Image Processing Techniques For Evaluation Of Pavement Deterioration
31	Dr. Kishore Upla Sardar Vallabhbhai National Institute of Technology, Surat	Multi-resolution Image Fusion
32	Dr. Ramandeep Kaur Malhi M. S. University of Baroda	Identification of phenological events for forest tree species using optical data
33	Mr. Bharath Setturu Indian Institute of Science, Bangalore	Visualising landscape dynamics - Central western Ghats
34	Mr. Bharath Setturu Indian Institute of Science, Bangalore	Forest fragmentation in Uttara Kannada
35	Mr. Ketul Parikh Dhirubhai Ambani Institute of Information and Communication Technology	Object recognition using Deep Neural Network (DNN)
36	Mr. S. Anudeep Indian Institute of Technology Kanpur	Estimation of soil moisture using radiative transfer approach for Indo – Gangetic basin
37	Mr. Divyesh Varade Indian Institute of Technology Kanpur	Multi-Sensor based framework for Snow Cover Classification
38	Ms. Asmeet Ahluwalia Indian Institute of Technology Bombay	Urban area mapping from polarimetric SAR data using fuzzy inference system
39	Ms. Khusboo Parakh Indian Institute of Technology Bombay	Machine learning and spectral techniques for lithological classification