



06-08 November 2023 - Jodhpur

Day 3: Technical Session 5-B | 08 November 2023, 11:30 – 13:00 hrs

Venue: Hall-B (2<sup>nd</sup> Floor, RC-W Main Building)

## UAV Applications and Advances in Digital Image Processing

Chair: ..... Co-chair: ..... Rapporteur: .....

SI No.	Title	Authors
1	Automatic Feature Extraction of UAV imagery using Deep Learning	Col Ranjan Negi Survey of India
2	UAV Application for Monitor and Map the Health of Solar Power Plant: A Study of Selected States in India	G. Shivakumar Nayka <sup>1</sup> , Keshav Vajapeyam <sup>1</sup> , Ramappa K B <sup>2</sup> <sup>1</sup> Institute for Social and Economic Change, Bengaluru <sup>2</sup> Audit Team Evaluator - Flight and Avionics
3	Fly Over the Farm: Monitor and Map the Health of Sugarcane and Maize Using Drone Application	Ramappa K B <sup>1</sup> , G. Shivakumar Nayka <sup>2</sup> , Keshav Vajapeyam <sup>2</sup> <sup>1</sup> Audit Team Evaluator - Flight and Avionics <sup>2</sup> Institute for Social and Economic Change
4	Tree Detection and Characterization in Diverse Agroforestry Systems using UAV Imagery and DL	Nagashree Mohan Kumar <sup>1</sup> , Rama Subramoniam S <sup>1</sup> , Satish Kumar B <sup>2</sup> , Shivam Trivedi <sup>1</sup> , Maddy Reddy S <sup>4</sup> , Satisha G.C <sup>3</sup> , Chamundeshwari D <sup>2</sup> , Narendran J <sup>2</sup> , Premananda.B. D <sup>4</sup> , Ramachandra Hebbar <sup>1</sup> , Srivastav SK <sup>5</sup> <sup>1</sup> Regional Remote Sensing Center - South, NRSC, Bangalore <sup>2</sup> National Remote Sensing Centre, Hyderabad. <sup>3</sup> Indian Institute of Horticulture Research, Bengaluru, <sup>4</sup> University of Agriculture Sciences, Bengaluru <sup>5</sup> Regional Centres, NRSC, New Delhi
5	A Comparative Assessment of Deep Learning Architectures for Tree Species Identification using UAV Images	Vinod PV <sup>1</sup> , Shivam Trivedi <sup>1</sup> , Behera MD <sup>2</sup> , Rama Subramoniam S <sup>1</sup> , Nagashree MK <sup>1</sup> , Narendran J <sup>3</sup> , Hebbar R <sup>1</sup> , Srivastav SK <sup>4</sup> <sup>1</sup> Regional Remote Sensing Center - South, NRSC, Bangalore <sup>2</sup> IIT-Kharagpur, <sup>3</sup> National Remote Sensing Centre, Hyderabad.

		<sup>4</sup> Regional Centres, NRSC, New Delhi
<b>6</b>	Extraction of canopy parameters of Sweet Orange (Citrus sinensis) Trees using UAV based multispectral Data through Object-based Analysis	Laxman Boggarapu, Karun Kumar Choudhary, V.M. Choudary, B.Narender National Remote Sensing Centre, Hyderabad
<b>7</b>	UAV Application for Terrain Mapping: Ascertain Pipeline Network for "Jal Jeevan Mission" in Rural and Peri-Urban Areas of Karnataka	Keshav Vajapeyam <sup>1</sup> , G. Shivakumar Nayka <sup>1</sup> , Ramappa K B2 and Shivakumara C R3 <sup>1</sup> Institute for Social and Economic Change, Bengaluru <sup>2</sup> Audit Team Evaluator - Flight and Avionics <sup>3</sup> Department of Minority Welfare, Government of Karnataka
<b>8</b>	A Hybrid domain approach to remove horizontal stripping in remote sensing images using spatial, frequency & wavelet components	Vikash Tyagi, N Ravi, Wagh Ganesh Nana, P Suresh Kumar, R. Chandrakanth Advanced Data Processing Research Institute
<b>9</b>	Band Reconstruction for High Resolution Satellite Images using Deep Learning	Md Aminur Hossain, Sanjay K. Singh, Arvind K. Singh, Devakanth S. Naidu Space Application Centre
<b>10</b>	Enhancing Mining Efficiency and Safety with Autonomous Drone Technology	Darshana Kumare, Amogh Gudekar, Cyriac Joseph, Satya Prakash Balooni Squadrone Infra and Mining Private Limited
<b>11</b>	From Aerial to Orbit: Navigating the Unknowns of Super Resolution for Satellite Imagery	D Anthony Balaraju, S Swarajya Lakshmi, Novaline Jacob Advanced Data Processing Research Institute