

# **2019 International Conference on Intelligent Computing and Remote Sensing (ICICRS 2019)**

**Bhubaneswar, India  
19 – 20 July 2019**



**IEEE Catalog Number: CFP19T23-POD  
ISBN: 978-1-7281-3710-0**

**Copyright © 2019 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP19T23-POD
ISBN (Print-On-Demand):	978-1-7281-3710-0
ISBN (Online):	978-1-7281-3709-4

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## Table of Contents

Pg No	Content
	Keynote Addresses
	Organizing Committee Details
	Technical Paper Reviewer Details
1	Articles
<b>3</b>	<b>Communication Systems &amp; Data Analysis Application Track</b>
5	<i>Design of a 12 kW Sheet Beam EIK for W-Band Radar</i>
9	<i>Design of a W-band Multi-Beam Folded Waveguide TWT for High Data-Rate Communication</i>
12	<i>Effect of Greenhouse Gas Concentration on Solar Photovoltaic Performance</i>
16	<i>Design of Lyapunov based Model Reference Adaptive Controller for First Order Plus Delay Time Liquid Level System</i>
N/A	<i>A DE algorithm optimized TIDF plus second derivative Order controller for Load Frequency Control of two-area thermal power system</i>
21	<i>Differential Evolution algorithm technique based Automatic Generation Control of Two-area Power Systems using Hybrid PID controller with filter</i>
27	<i>Photovoltaic Cell Based Shunt Active Filter and Power Quality Improvement Using Hybrid Optimization Technique</i>
<b>33</b>	<b>GIS Applications Track</b>
35	<i>An Assessment of the Desertification Vulnerability based on MEDALUS model</i>
41	<i>Hydrologic Impact assessment of glaciated BEAS river basin using High Resolution Climate Simulations from CORDEX Regional Climate Models</i>
47	<i>DEM Based Categorisation of Landslides Induced by 2011 Sikkim Earthquake</i>
51	<i>Application of GIS in Crime Assessment: A Case Study of Shillong Municipal Area</i>
<b>57</b>	<b>Remote Sensing Track</b>
N/A	<i>Hybrid CNN-LSTM model for classification of multispectral satellite images</i>
59	<i>Identifying degrees of built arrangement in Indian cities through mid-resolution satellite imagery and Convolutional Neural Networks</i>
65	<i>Impact of Summer Rice Cultivation on Ground Water in Pilibhit District, Uttar Pradesh, India</i>

71	<i>Assessing Degradation in Local Environment due to Recent Urban Sprawl: Case Study of an Indian Satellite Town</i>
N/A	<i>Use of LIDAR Point Data for Noise Prediction:- “Determination of Terrain Parameters for Modelling”</i>
77	<i>An Android/Web based Application to Estimate Nitrogen Concentration in Rice Crop of Western Odisha</i>
82	<i>Above Ground Biomass Estimation of Son Beel using Landsat 8 OLI</i>
<b>89</b>	<b>Artificial Intelligence &amp; Machine Learning Track</b>
91	<i>Emotional Intelligence through Body Temperature using Hybrid Progressive Approach</i>
N/A	<i>Deep Learning Prognostication Structure for Stock Value Prediction</i>
94	<i>A Novel Approach Towards Industrial Waste Management Using Q-Learning</i>
100	<i>A Multi facet Deep Neural Network Model for Various Plant Disease Detection</i>
106	<i>Learning Disease representations from Discharge Summaries</i>
114	<i>Diabetes Prediction using Machine Learning Techniques</i>
120	<i>Ensemble Bagging Script Identification of Handwritten South Asian Documents</i>
<b>125</b>	<b>Wireless Sensor Networks and IoT Track</b>
127	<i>Privacy Preserving Secure Data Storage scheme based on Adaptive ANN and Homomorphic Re-Encryption Algorithm for Cloud</i>
N/A	<i>Demand Based Secured data Transmission in WSN</i>
133	<i>ISMAC: Past, Present, and Future of Digital Technologies</i>
139	<i>Property Fraud Detection And Prevention Using Blockchain</i>
144	<i>A Novel Distributed Energy Efficient Routing Algorithm Based on Clustering Mechanism in WSN</i>
150	<i>A Smart System for the People Enduring through Alzheimer’s Disease</i>
155	<i>Security Protocols in Internet of Things (IoT) – A Review</i>
161	<i>Routing Protocols in WSN Assisted IoT Infrastructure - A Review</i>
<b>167</b>	<b>Digital Signal, Image and Video Processing</b>
169	<i>Performance analysis of different decomposition methods for classification of crops and other land cover targets using Risat-1 hybrid SAR imageries</i>

175	<i>European Script Identification using Projection Profiles and Statistical Features for Handwritten Documents</i>
181	<i>An Automated Technique for Screening of Diabetic Retinopathy from Fundus Images</i>
187	<i>Localization and Estimation of Plant Disease Intensity for Aerial Image</i>
N/A	<i>Content Based Image Retrieval for SAR Image Data Using Multi-Resolution Analysis and Texture Feature Extraction</i>
191	<i>Intelligent Optical Tracking</i>
196	<i>Comparison of tree canopy extraction using Object Based Image Analysis and Deep Learning Technique in UAV images</i>
201	<i>Suspicious Object Detection</i>
<b>205</b>	<b>Other Articles</b>
207	<i>Machine Learning Based Improved Recommendation Model for E-learning</i>
213	<i>Novel Approach for Steiner Nodes Filtration in VLSI Global Routing</i>
219	<i>Reconstruction of Torn Document by Moore Algorithm</i>
223	<i>Cost-Effective Dynamic Workflow Scheduling in IaaS Cloud Environment</i>