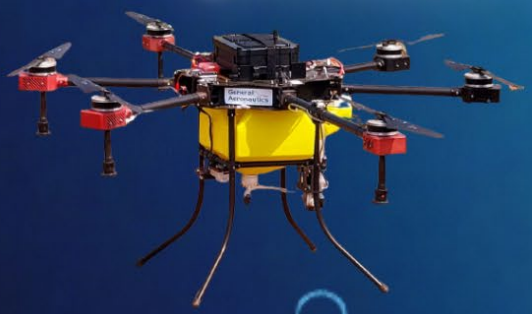
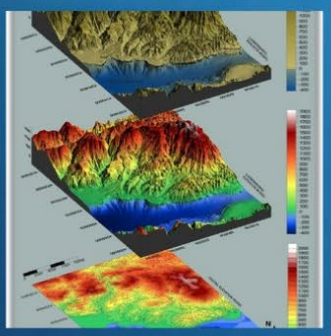
Centurion University

Shaping Lives...
Empowering Communities...

Centre for Data Science and Machine Learning (2020-23)

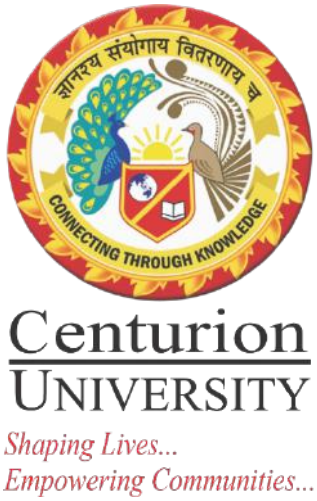




Version 1/2023

Centre for Data Science and Machine Learning

Centurion University of Technology and Management, Odisha, India



Mentor: Prof. (Dr.) I. V. Murali Krishna,
Retired Scientist from DRDO,
Adjunct Professor, SoET

CEO: Dr. Sujata Chakravarty
Dean, SoET, Professor, Computer Science & Engineering
RC Coordinator: Dr. Prafulla Kumar Panda
Associate Professor and Head, Department of Civil Engineering

“We are entering a new world. The technologies of machine learning, speech recognition, and natural language understanding are reaching a nexus of capability. The end result is that we’ll soon have artificially intelligent assistants to help us in every aspect of our lives.”

~Amy Stapleton

Message from CEO and RC Coordinator

Our research centre on Data Science and Machine Learning comes with extensive multidisciplinary research on the application of machine learning in diverse technologies and sectors. Not only machine learning, but our research centre also focuses on delivering solutions in precision agriculture, remote sensing, GIS, drone image processing, multispectral image processing, hyperspectral image processing, natural language processing, geotechnical engineering, geophysical investigations and numerous such. Our research centre comprises professional researchers from different backgrounds who can take the assistance of machine learning in accomplishing multiple multidisciplinary solutions. Further, our research centre creates societal and environmental impact through research. Our research centre organizes events and workshops to spread our research across the nation. The team members work wholeheartedly to make this research centre a perfect place for advanced machine learning research. We deliver projects in collaboration with our academic and industry partners like Gram Tarang, Dassault Systems, CSIR-Central Building Research Institute Roorkee, NRRI Cuttack and numerous such.

Dr. Sujata Chakravarty
CEO, DSML

Dr. Prafulla Kumar Panda RC,
Coordinator

Team Members: Centre for Data Science and Machine Learning

Dr. Sujata Chakravarty
CEO, DSML

Dr. Prafulla Kumar Panda
RC, Coordinator

Dr. Subrata Sarangi
Professor

Dr. Mohammed Siddique
Associate Professor

Dr. Dhawaleswar Rao CH
Associate Professor

Mr. Sunil Kumar Mahapatra
Assistant Professor

Mr. Anil Kumar Meher
Assistant Professor

Dr. Sabyasachi Dey
Assistant Professor

Dr. Tufleuddin Biswas
Assistant Professor

Mr. Nilamadhab Dash
Assistant Professor

Dr. Soumik Ray
Assistant Professor

Mr. Sovan Sankalp
Assistant Professor

Mr. Jagannath Padhy
Assistant Professor

Ms. Aryalopa Malla
Assistant Professor

Dr. Bibhuti Bhusan Sahoo
Assistant Professor

Mr. Susant Kumar Nayak
Assistant Professor

Dr. Sasmita Kumari Nayak
Associate Professor

Dr. Sisir Ranjan Dash
Assistant Professor

Dr. Kamal Kumar Barik
Associate Professor

Mr. Saneev Das
Assistant Professor

Content

1. Introduction

The Centre for Data Science and Machine Learning has made significant strides since its establishment in 2020. With a strong emphasis on Research & Development (R&D), the centre has been at the forefront of developing cutting-edge, low-cost technologies that are tailored to meet the specific needs of various industries and sectors. Through its dedicated team of data scientists and machine learning experts, the centre has successfully leveraged the power of data to drive innovation and solve complex problems. By fostering collaboration with industry partners and academic institutions, the centre has created a dynamic ecosystem that encourages the exchange of ideas and knowledge sharing. As a result, the centre's indigenous technologies have not only contributed to technological advancements but have also played a pivotal role in empowering businesses and driving economic growth on both a local and global scale.

1.1. Aim and Objectives of RC

The main objectives of the Research Centre are:

- To be a well-known source of knowledge and an interchange for technologically innovative and inclusive solutions in the fields of engineering and technology.
- To foster collaboration with universities, eminent scientists, and industries on a national and worldwide level.
- To encourage the adoption of creative and business-minded ideas.
- Improving student employment prospects through collaboration between industry and academic institutions and value-added initiatives applying the latest technologies.
- Assisting industrial projects with research and development as a consultant.
- Publication of scientific findings in national and international publications with peer evaluation and patent applications.

1.2. Focus Areas

- Machine Learning and Its Applications
- Multispectral and Hyperspectral Image Processing
- Automatic Plant Disease and Pest Detection
- Natural Language Processing
- Geomatics and Its Application
- Big Data Analysis using Hadoop and MongoDB

- Extract, Transform and Load (ETL)

1.3. Software operated by the Domain

- MYSQL, ORACLE, MATLAB, VSCODE, DEV C++, JFLAP, R, R-STUDIO, Anaconda, QGIS, Android Studio, Virtual Box, Putty, SPSS.

1.4. Domain Courses

- Data Science and Machine Learning
- Aerial Surveying and Remote Sensing Applications
- Business Analytics
- Data Analytics

1.5. Skill Courses

- High-Tech Surveying
- Advanced Geographic Information System and GIS
- Satellite-Based Remote Sensing
- Spectral Image Processing using Python

2. Research and Projects

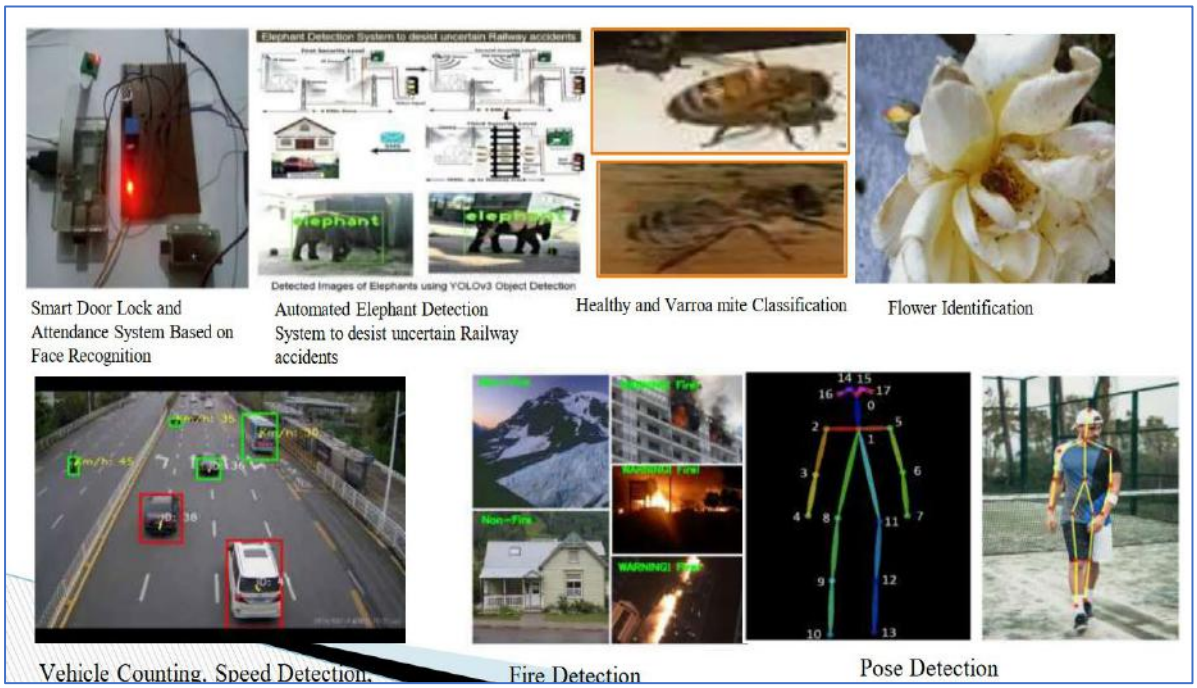
2.1. Funded Projects

- Dr. Sujata Chakravarty, (2022), "Cost effective ICT Data Analytics system for Efficient Management of Water and Fertiliser in Precision Agriculture" Dassault Systemes Foundation.
- Dr. Prafulla Kumar Panda, DST/NRDMS Sanctioned project period of two years (13.6 lakhs) entitled “Development of Disease map and Health care service for selected Diseases in tribal regions of Gajapati and Rayagada district of Odisha” 2015-17 (**Completed.**)

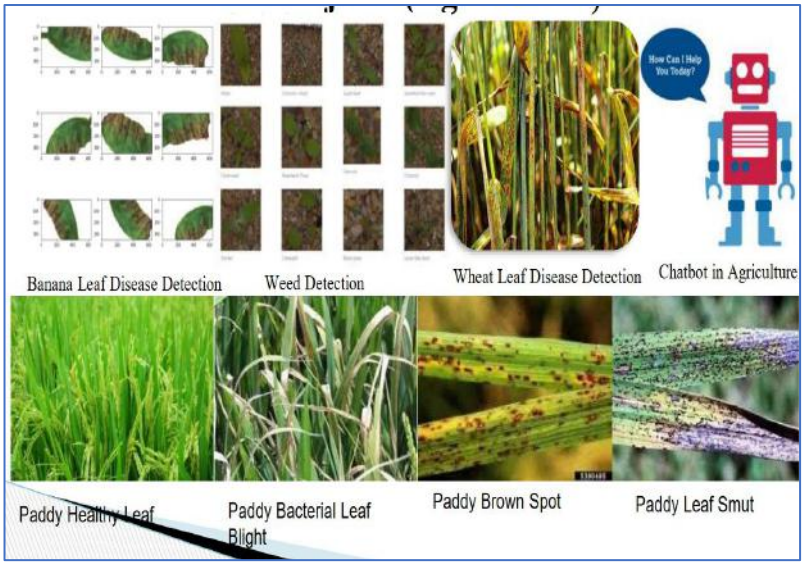
2.1.1. CUTM Ongoing Projects

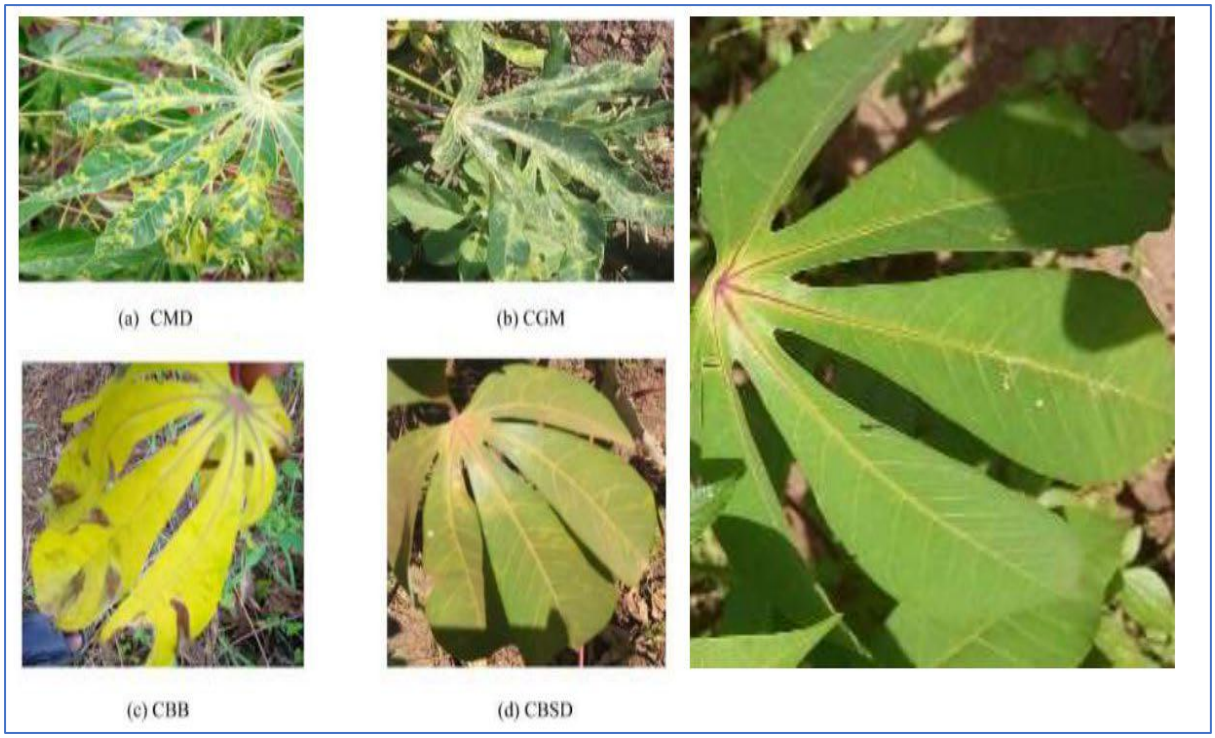
- Application of Machine Learning in Hyperspectral Image Analysis
- Machine Learning-Based Eye Health Care System
- Leaf Disease Detection System
- Automated Elephant Detection System to desist uncertain Railway accidents by unifying AI and IoT
- Primary productivity modelling in coastal waters of the Bay of Bengal
- Automatic Creation Question Bank using AI/ML
- Early Warning System for Elephant and Train Collision Project
- Automatic Disease and Pest Detection in agriculture
- Drone Image Analysis

2.1.2. Machine Learning Projects

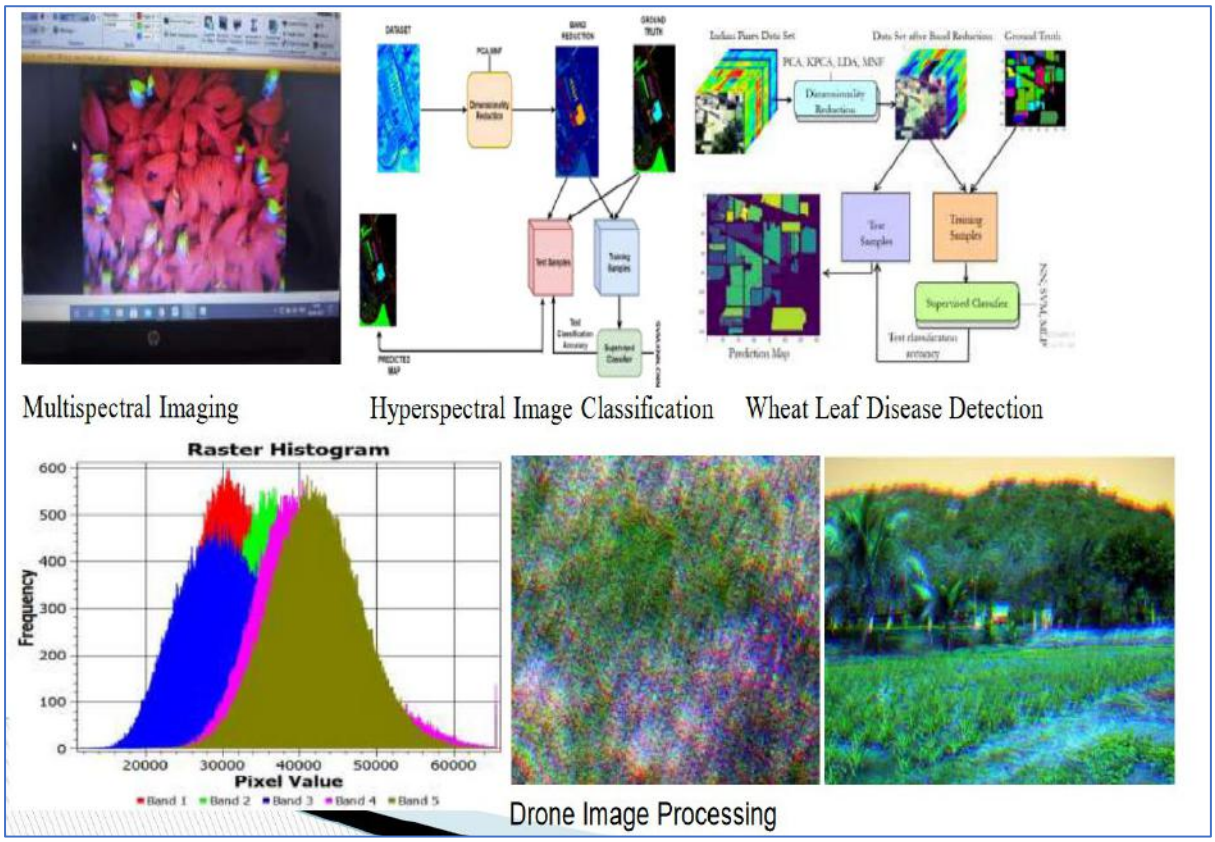


2.1.3. Machine Learning Projects in Agriculture

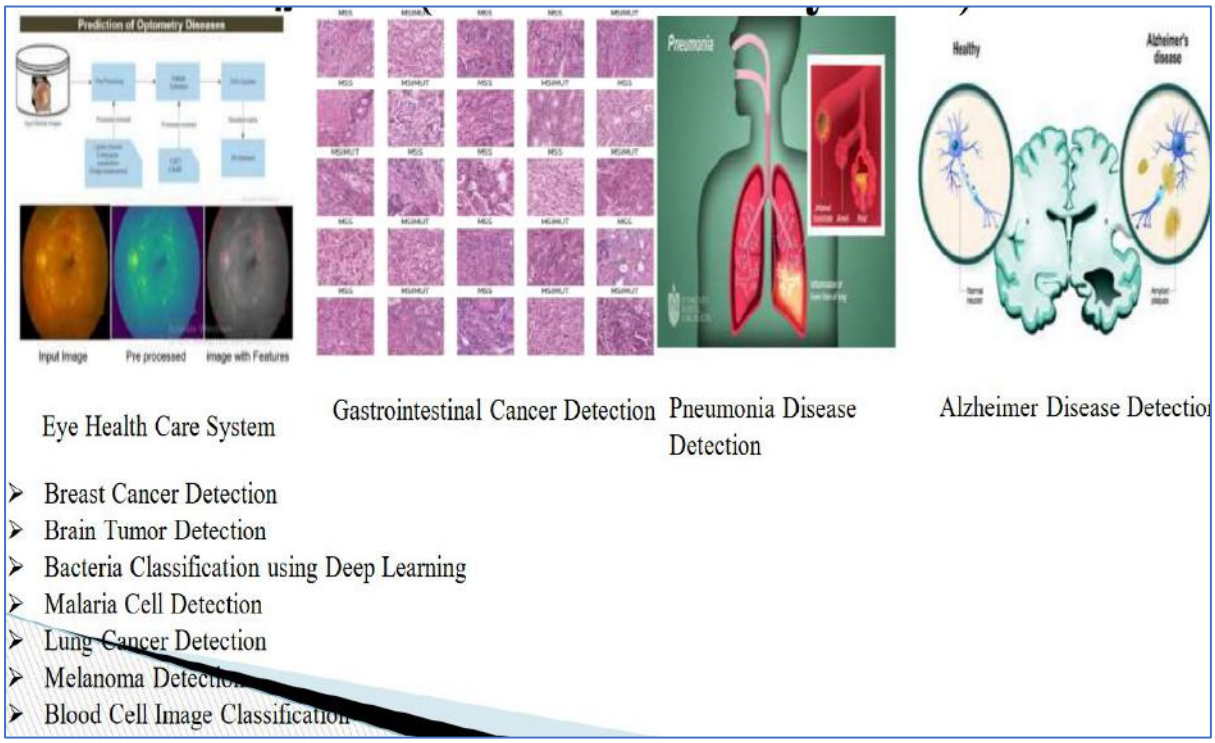




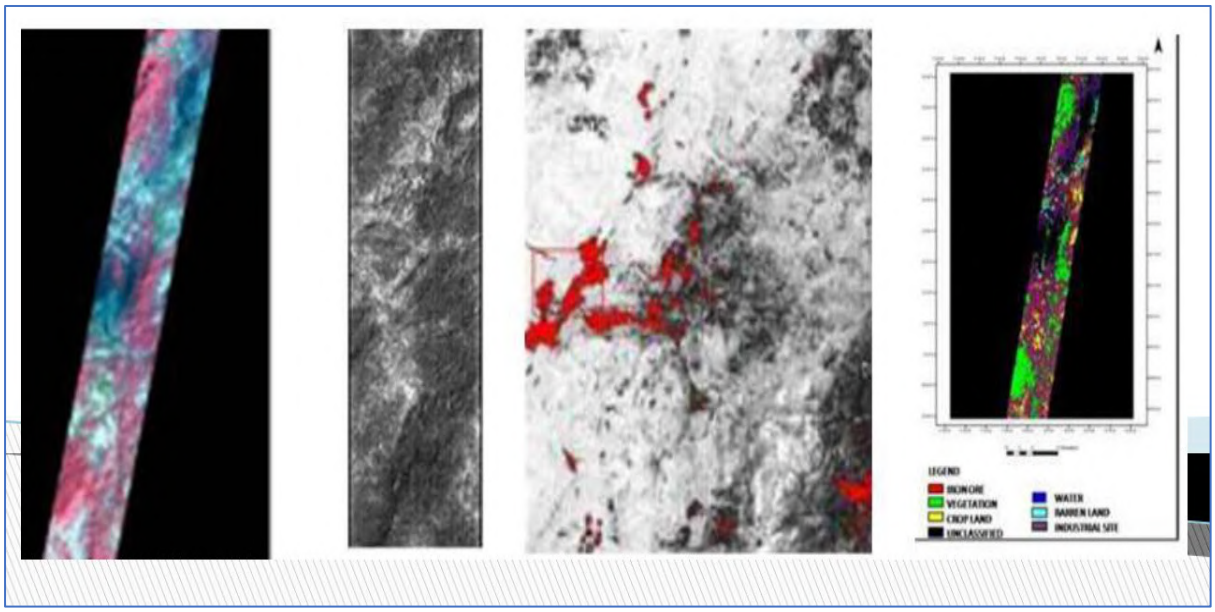
2.1.4. ML, Multispectral & Hyperspectral Imaging



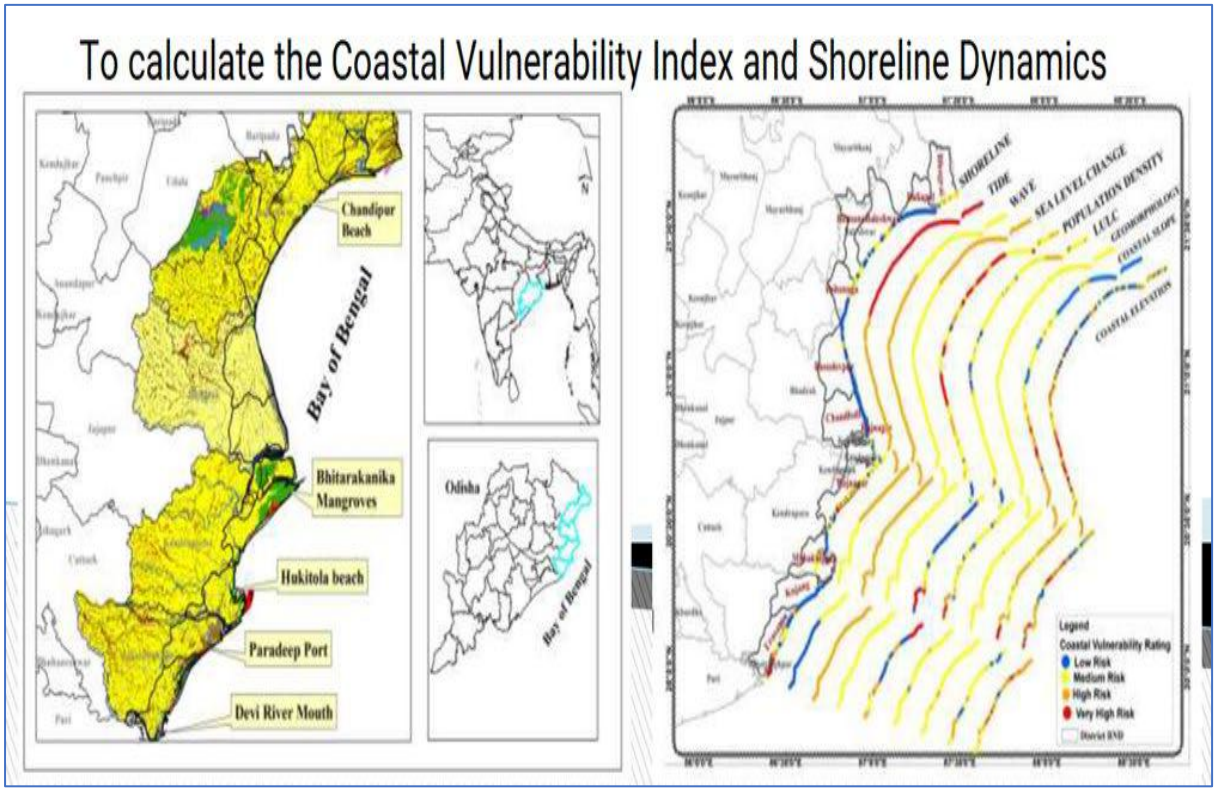
2.1.5. ML Projects (Health Care System)



2.1.6. Iron Ore Discrimination using Hyperspectral Image Analysis in Keonjhar District, Odisha by Dr. PRAFULLA KUMAR PANDA and Dr. KAMAL BARIK



2.1.7. Coastal Zone Management of East Coast of India by Dr. PRAFULLA KUMAR PANDA and Dr. KAMAL BARIK



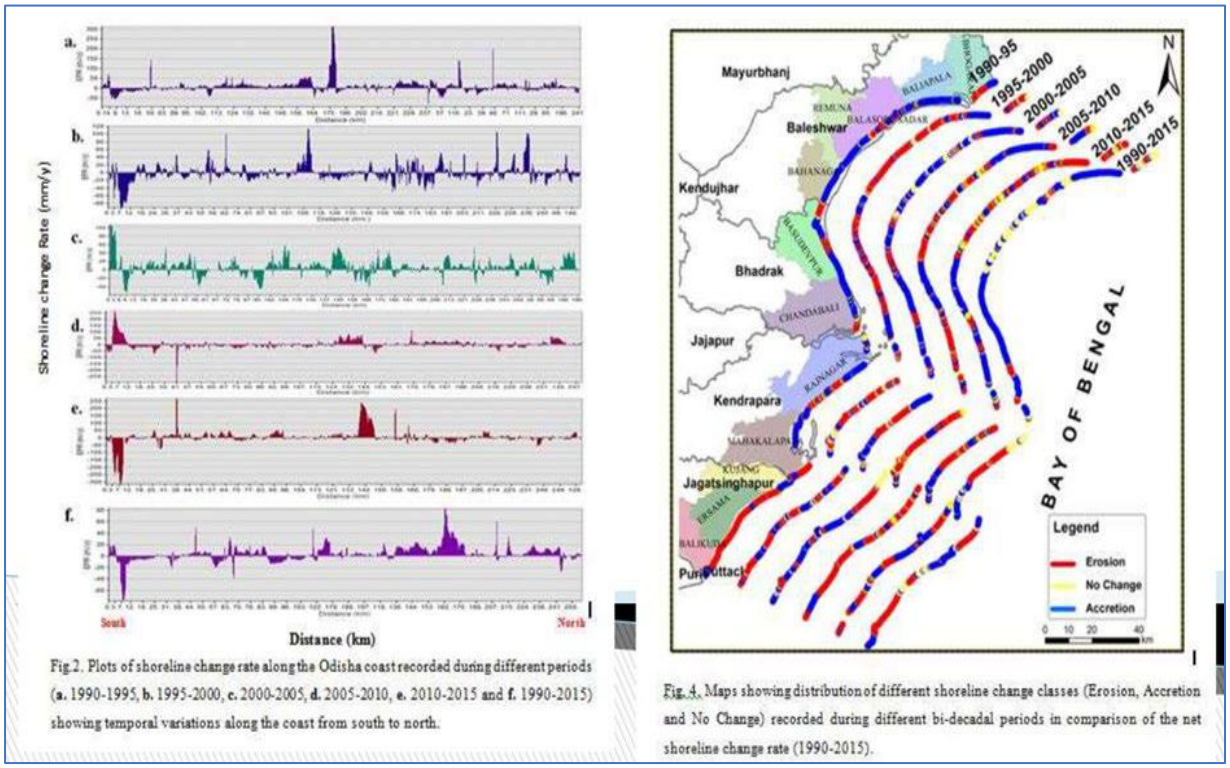
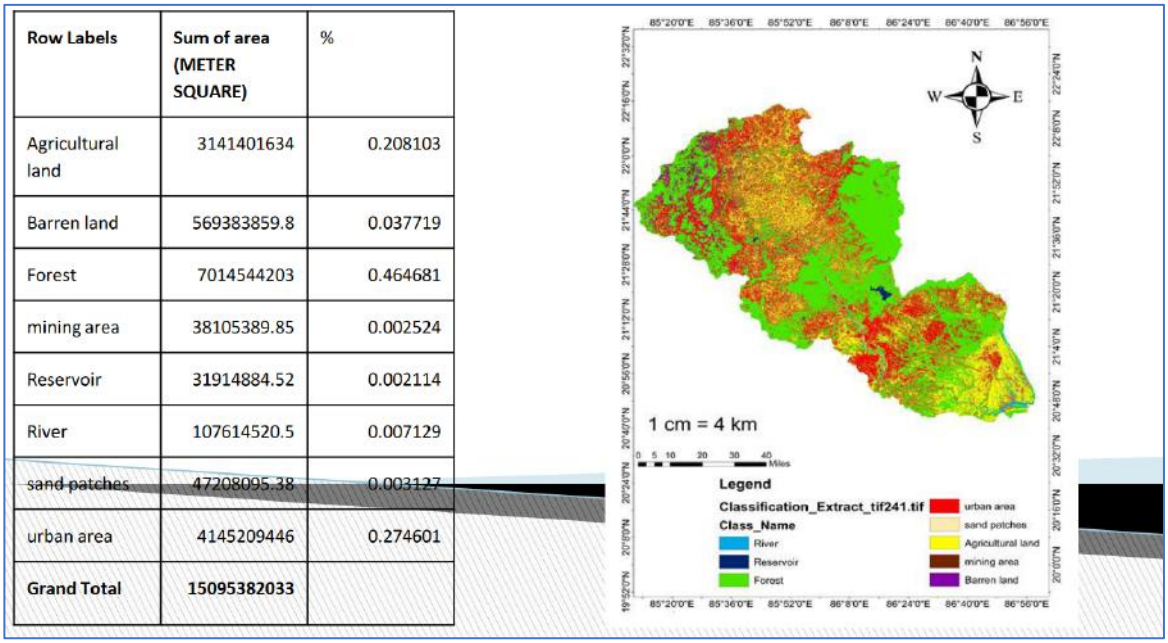


Fig.2. Plots of shoreline change rate along the Odisha coast recorded during different periods (**a.** 1990-1995, **b.** 1995-2000, **c.** 2000-2005, **d.** 2005-2010, **e.** 2010-2015 and **f.** 1990-2015) showing temporal variations along the coast from south to north.

Fig. 4. Maps showing distribution of different shoreline change classes (Erosion, Accretion and No Change) recorded during different bi-decadal periods in comparison of the net shoreline change rate (1990-2015).

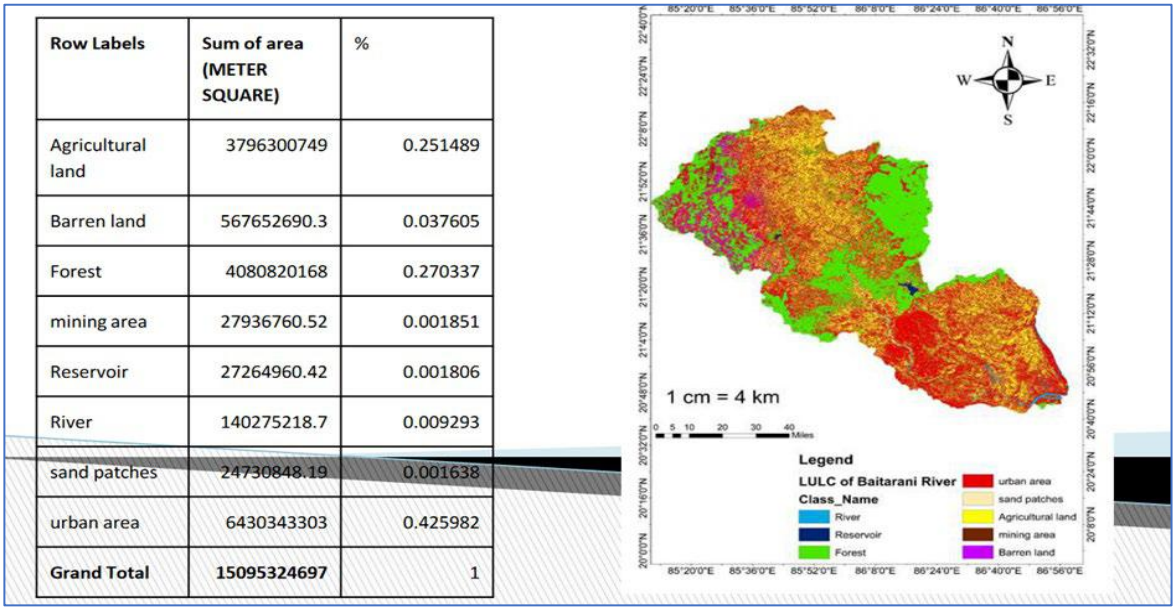
2.1.8. Flood Inundation Mapping of the Baitarani River using HEC-RAS by Dr. PRAFULLA KUMAR PANDA And Prof. Sovan Sankalp

Row Labels	Sum of area (METER SQUARE)	%
Agricultural land	3141401634	0.208103
Barren land	569383859.8	0.037719
Forest	7014544203	0.464681
mining area	38105389.85	0.002524
Reservoir	31914884.52	0.002114
River	107614520.5	0.007129
sand patches	47208095.38	0.003127
urban area	4145209446	0.274601
Grand Total	**15095382033**	

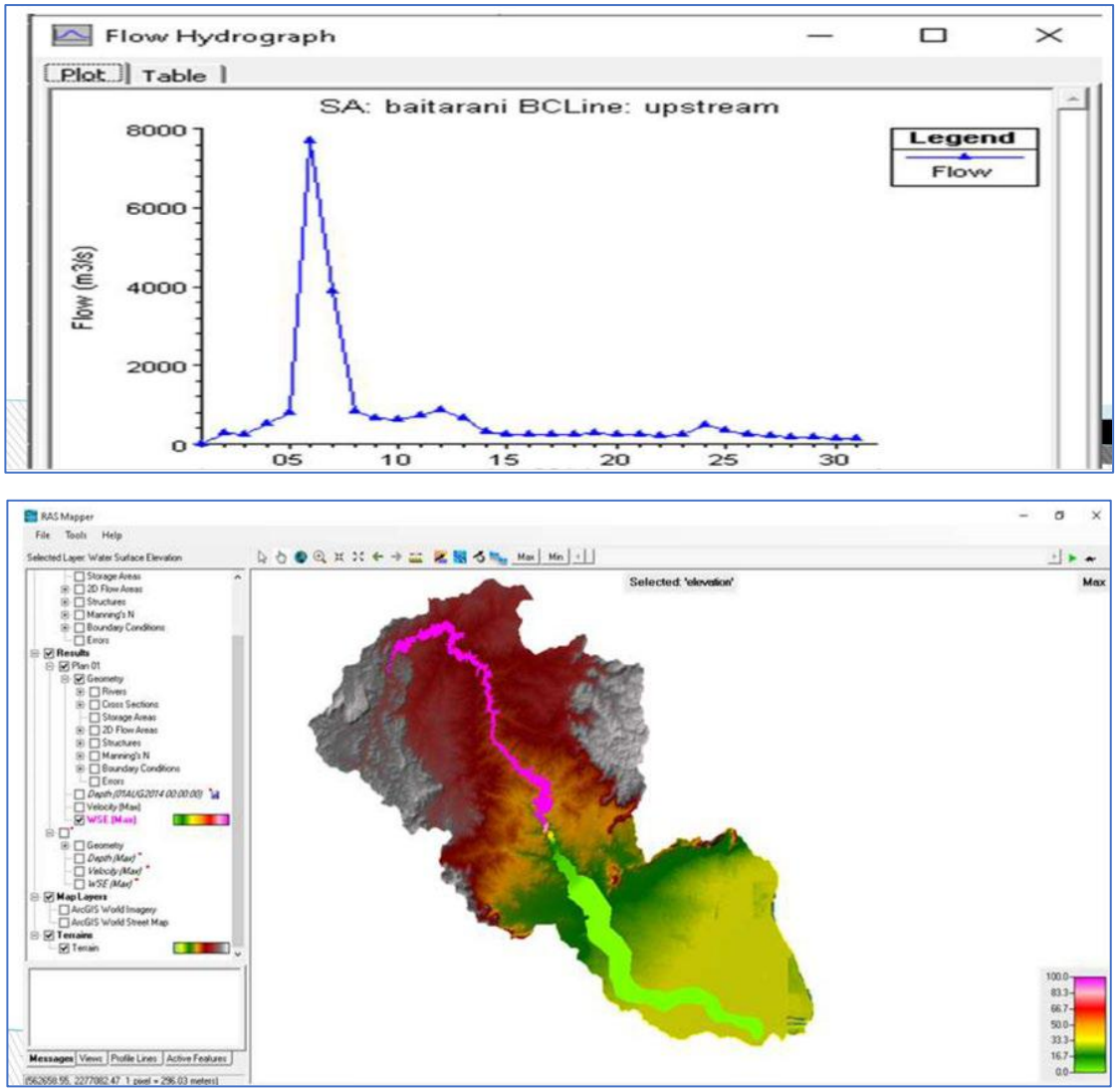


LULC Map before Flooding

Row Labels	Sum of area (METER SQUARE)	%
Agricultural land	3796300749	0.251489
Barren land	567652690.3	0.037605
Forest	4080820168	0.270337
mining area	27936760.52	0.001851
Reservoir	27264960.42	0.001806
River	140275218.7	0.009293
sand patches	24730848.19	0.001638
urban area	6430343303	0.425982
Grand Total	**15095324697**	1

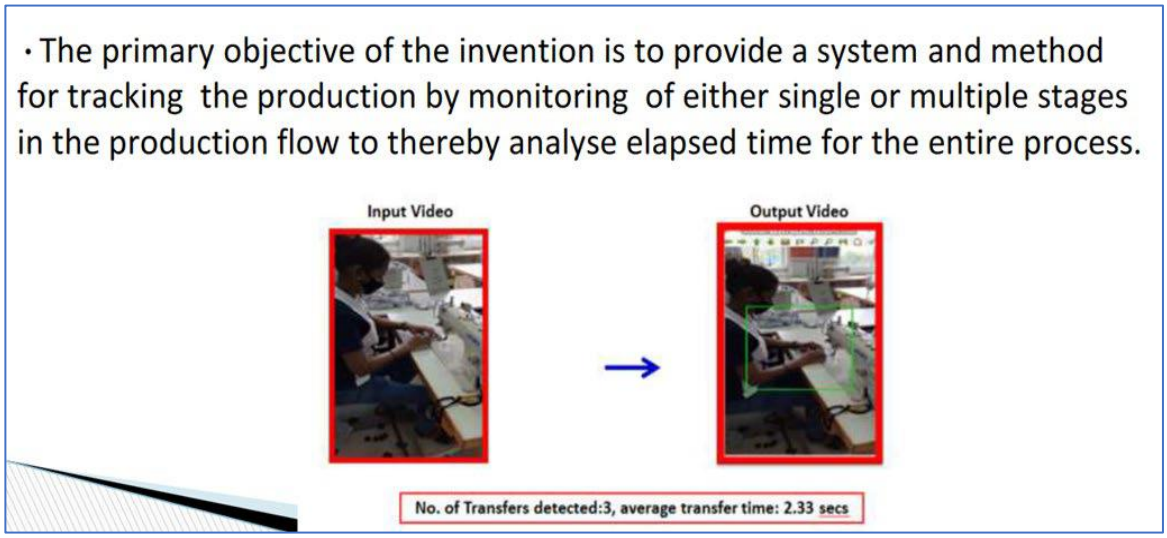


LULC Map post Flooding



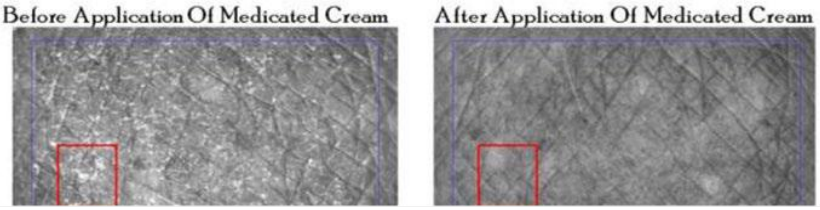
Flood inundation mapping and Flood Hydrograph

2.1.9. Advance Video Processing for Production Tracking by Mr. Nilamadhab Dash and Ms. Sasmita Kumari Nayak

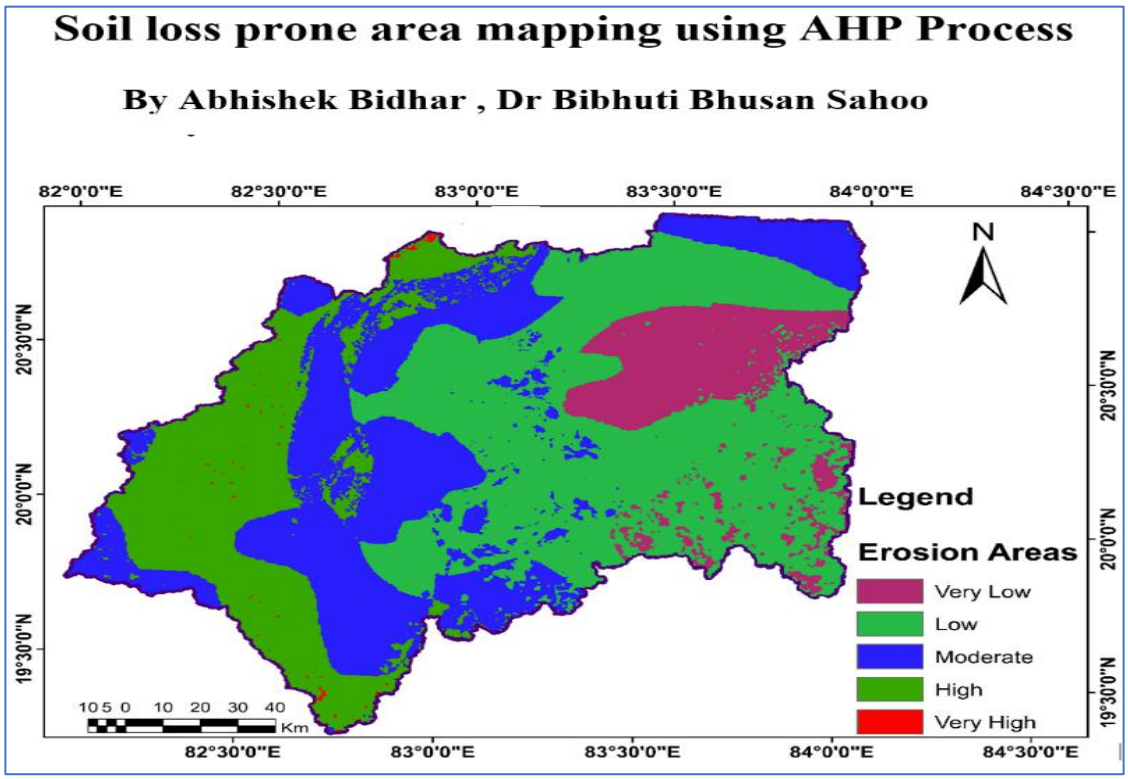


2.1.10 Effectiveness of Cosmetic Product on Wrinkled Screen by Mr. Nilamadhab Dash and Ms. Sasmita Kumari Nayak

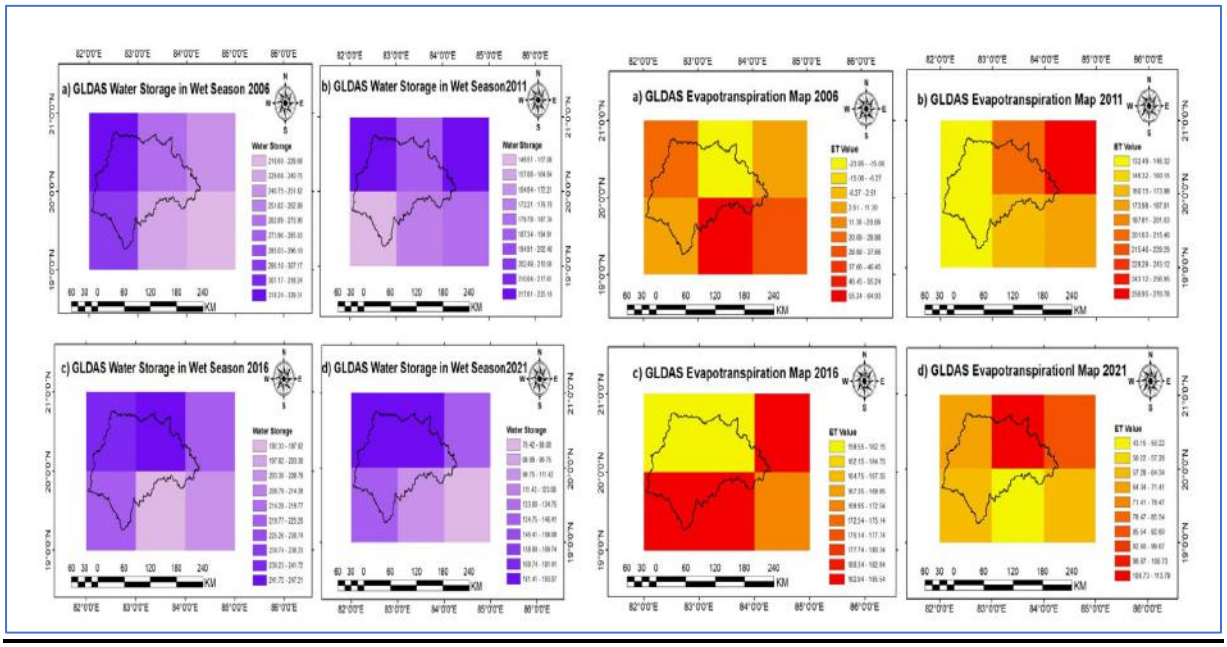
- From the pair of Images before and after application of the Medicated Cream
- Take one small ROI, Apply all the Features of Grey Level Co-Occurrence Matrix [GLCM] and find the Feature which gives Maximum Difference between before and after application of the Cream



2.1.11 Soil Loss Prone Area mapping using AHP Process by Dr. Bibhuti Bhusan Sahoo



2.1.12 Water Budget Assessment for using GLADS and Earth observation data: A Case Study of the Tel River Basin, India Dr. Bibhuti Bhusan Sahoo



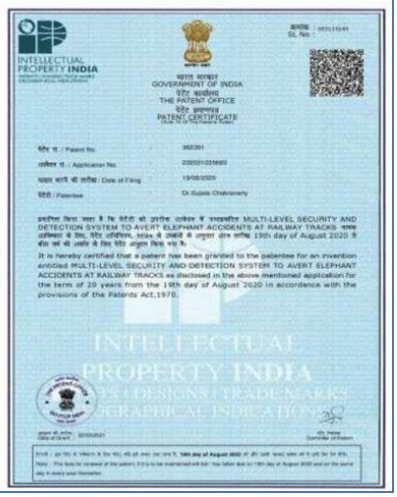
3. Patents, Publications

3.1 Patents (Granted)

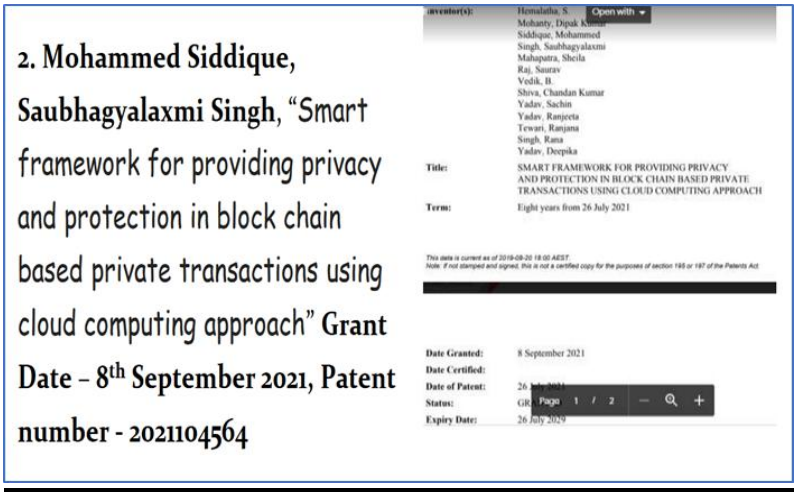
1. Payal Bhadra, Avijit Balabantaray, S. Chakravarty, "Multi-Level Security and Detection System to Avert Elephant Accidents at Railway Tracks" Application number –202031035660, Publication date - 04/09/2020, Grant Date – 22nd March 2021, Patent number – 362391
2. Mohammed Siddique, Saubhagyalaxmi Singh, Smart framework for providing privacy and protection in blockchain based private transactions using cloud computing approach" Granted Date – 8th September 2021, Patent number – 2021104564
3. Prafulla Kumar Panda, IOT based food waste recycling machine: Design No. 377851-001, granted on 15/03/2023

3.2 Pictorial Proofs of Granted Patents

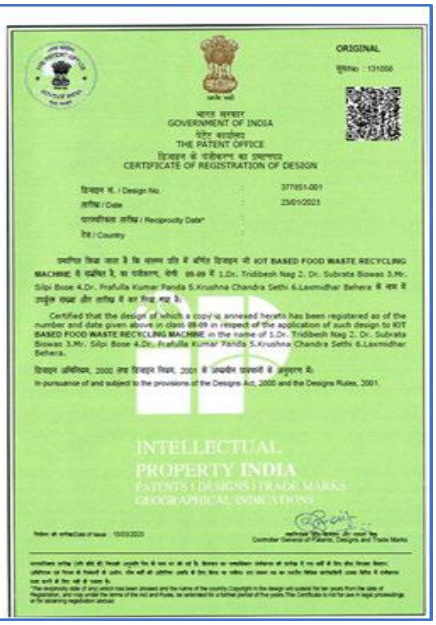
1. Payal Bhadra, Avijit Balabantaray, Sujata Chakravarty, "Multi-Level Security and Detection System to Avert Elephant Accidents at Railway Tracks" Application number –202031035660, Publication date - 04/09/2020, **Grant Date – 22nd March 2021, Patent number - 362391**



2. Mohammed Siddique, Saubhagyalaxmi Singh, "Smart framework for providing privacy and protection in block chain based private transactions using cloud computing approach" Grant Date – 8th September 2021, Patent number - 2021104564



Dr. Prafulla Kumar Panda, IOT BASED FOOD WASTE RECYCLING MACHINE



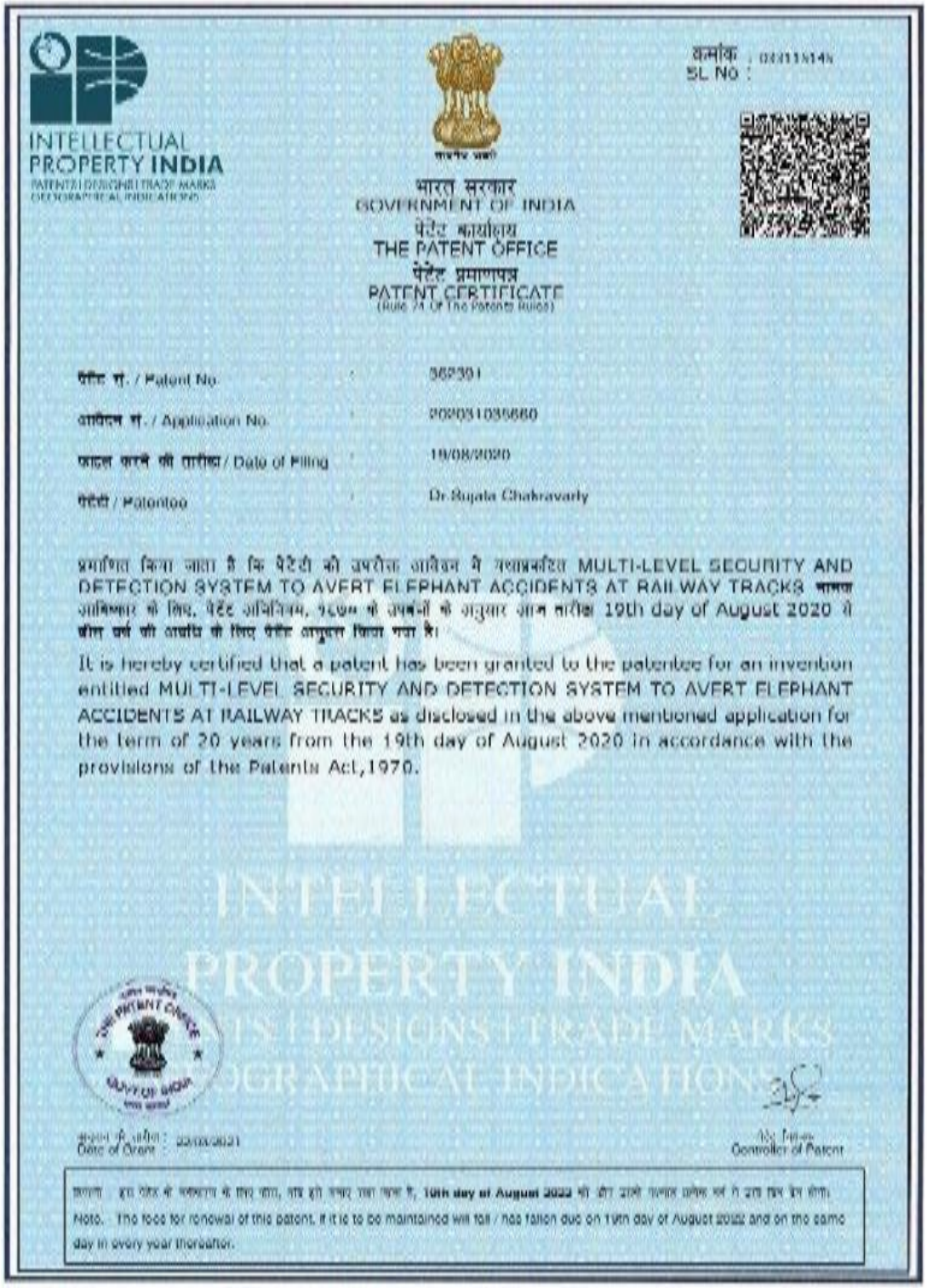
3.3 Patents (Published)

1. Siddique, M. Title: Artificial intelligence-based automatic system for detection and prevention of unhealthy region of plant leaves using image processing and genetic algorithm for high yields in smart farming Application Number-202341016195, Published on 24-03-2023.
2. Sasmita Kumari Nayak. Title: Classification of mental stress and psychological disorder from electrocardiogram signals using Machine Learning Approach, Application Number: 202341020626, Published on 07-04-2023.
3. Siddique, M. (2022). Secure routing protocol in opportunistic Internet of things network using machine learning approach (India Patent No. 202241062660).

4. Siddique, M. (2022). IOT based irrigation system using soil moisture sensor in agriculture field (India Patent No. 202241065251).
5. Siddique, M. (2022). Banana leaf disease detection using CNN- open CV-Deep learning approach. IP India Application Number- 202241073393, Published on 30th December 2022.
6. Dash, N. (2022). A system and a method of improved SCA-ELM based Densenet121 for classification of fruit diseases.
7. Singh, Saubhagyalaxmi. (2022): IOT based electric vehicle control systems in smart cities (Indian Patent No.-202241073743).
8. Nayak, S. K. (2022). Automatic detection and classification of eye disease using convolution neural network and image processing (India Patent No. 202241062141).
9. Mohapatra, S. K (2022). Real time Crop Recommendation Framework based on Soil Quality and Environmental Condition Using Machine Learning Model. (India Patent No.202231056814)
10. Dr. Prafulla Kumar Panda, Mr. Sovan Sankalp and Dr. Bibhuti Bhusan Sahoo "A METHOD FOR STUDY RISK MITIGATION AND MANAGEMENT IN AGRICULTURAL PRACTICES AMONG FARMERS USING ICT". IP India Application Number- 202231075297 Published on 30/12/2022
11. Dr. Prafulla Kumar Panda, Mr. Sovan Sankalp and Dr. Bibhuti Bhusan Sahoo "A DISEASE VULNERABILITY AND COMBAT MAPPING MODEL FOR TRIBAL FORTIFICATION USING GEOSPATIAL". IP India Application Number- 202231069849 Published on 30/12/2022.
12. S. Chakravarty, Methods and systems for Agricultural work by smart Agriculture Field Boundary with AI & ICT (Published 16th July 2021)
13. Mohammed Siddique, 'Intelligent system for satellite communication from mobile device to public land mobile networks using IOT & methods thereof, IP India Application Number- 202141033481 Published on 6th August, 2021.
14. Mohammed Siddique, Saubhagyalaxmi Singh, IOT based pulse oximeter for patient health monitoring system, IP India Application Number- 202131033044, Published on 3rd December 2021
15. S. Chakravarty, Smart Attendance and Body Temperature Monitoring System at Working Site, Application number – 202131001373, (Published 12th February 2021) S. Chakravarty, System and Method for Health Care data Processing through IoT by

using Block chain Technology, Application number – 202031048523, (Published 11th December 2020).

16. S. Chakravarty, Method and Automated Safety Equipment for quick Detection of Biological Events of Hospitalized Patients for COVID Thereof, Application number – 202031039046, (Published 16th October 2020)
17. S. Chakravarty, Automated Portable Diagnostic System and Method for the Patient in COVID Hospital, Application number – 202031035686 (Published 11th September 2020)
18. S. Chakravarty, "Machine Learning Based Computer implemented method for managing production from a Hydrocarbon Reservoir", Application number – 201941040224, Publication date - 25/10/2019.
19. Dr. Prafulla Kumar Panda, Identification of hydrocarbon locales of an unexplored basin using space inputs and GIS, Application No.612/KOL/2015 A, Publication Date: 05/06/2015, International classification: G01V9/00



INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

क्रमांक : 0211514N
SL NO :

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 74 Of The Patents Rules)

पेटेंट सं. / Patent No.	:	362391
आवेदन सं. / Application No.	:	202031035660
फाइल करने की तारीख / Date of Filing	:	19/08/2020
पेटेंटी / Patentee	:	Dr.Rajala Chakravarty

प्रमाणित किया जाता है कि पेटेंटी की उपरोक्त आवेदन में यथाप्रकटित MULTI-LEVEL SECURITY AND DETECTION SYSTEM TO AVERT ELEPHANT ACCIDENTS AT RAILWAY TRACKS भारत आविष्कार के लिए, पेटेंट अधिनियम, १९७० की उपबंधों के अनुसार आज तारीख 19th day of August 2020 से बीस वर्ष की अवधि के लिए पेटेंट अनुदान किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled MULTI-LEVEL SECURITY AND DETECTION SYSTEM TO AVERT ELEPHANT ACCIDENTS AT RAILWAY TRACKS as disclosed in the above mentioned application for the term of 20 years from the 19th day of August 2020 in accordance with the provisions of the Patents Act,1970.

THE PATENT OFFICE

अनुदान की तारीख : 22/02/2021
Date of Grant :

Controller of Patent

टिप्पणी : इस पेटेंट को अक्षुण्ण रखने के लिए फीस, यदि कोई देय हो, 19th day of August 2022 को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।
Note. The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 19th day of August 2022 and on the same day in every year thereafter.

1. Sujata Chakravarty, Automated Portable Diagnostic System and Method for the Patient in COVID Hospital, Application number – 202031035686 (**Published 11th September 2020**)

GOVERNMENT OF INDIA

Application Details

APPLICATION NUMBER	202031035686
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	19/08/2020
APPLICANT NAME	1 . DR.SATYABRATA DASH 2 . DR.HEMRAJ SAINI 3 . DR.SUJATA CHAKARWARTY 4 . SWARNAPRABHA JENA 5 . SUBRAT KUMAR PRADHAN 6 . MR.BARADA P.PANIGRAHY 7 . DR.SUBASH CH. NATH 8 . DR.SUSANTA KUMAR ROUT
TITLE OF INVENTION	AUTOMATED PORTABLE DIAGNOSTIC SYSTEM AND METHOD FOR THE PATIENTS IN COVID HOSPITALS
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	dash_satyabrata@yahoo.co.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	19/08/2020
PUBLICATION DATE (U/S 11A)	11/09/2020

Application Status

APPLICATION STATUS	Application Awaiting Examination

View Documents

Filed → RQ Filed → Published → Under Examination → Disposed

2. Mohammed Siddique, Saubhagyalaxmi Singh, "Smart framework for providing privacy and protection in block chain based private transactions using cloud computing approach" Grant Date – 8th September 2021, Patent number - 202110456

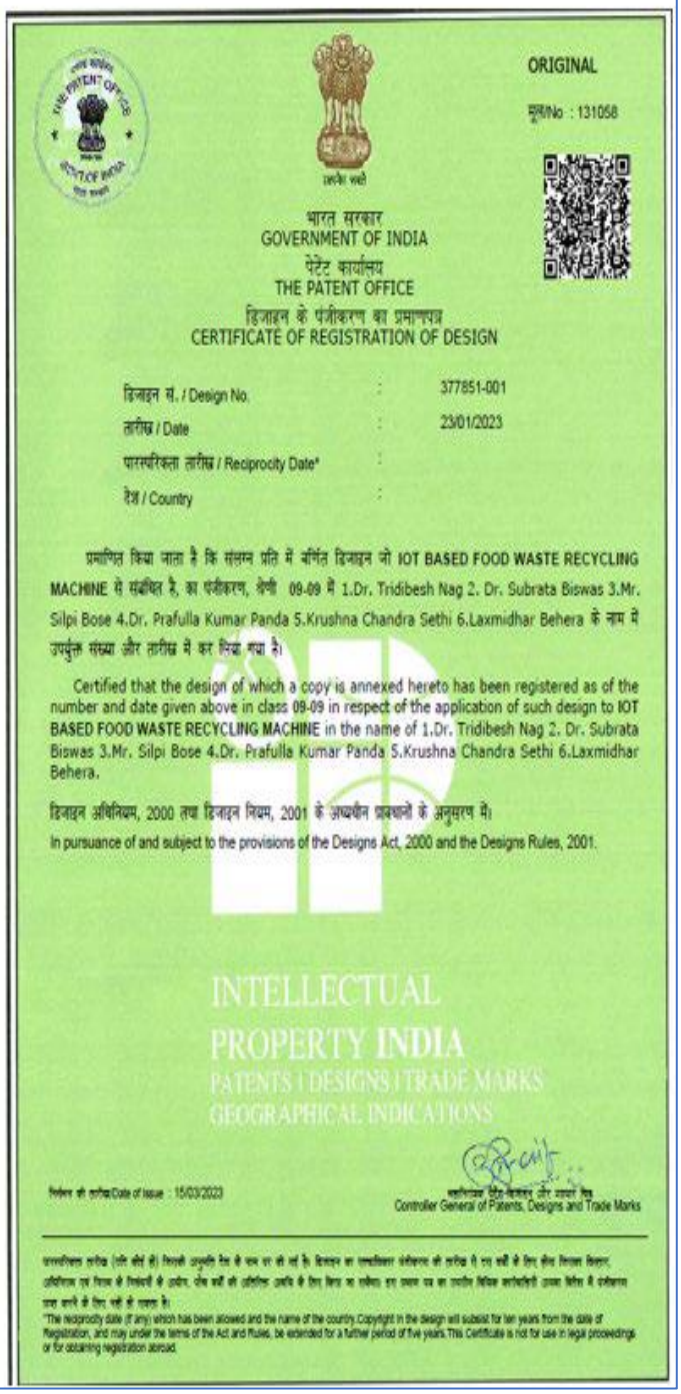
Inventor(s):	Hemalatha, S. Mohanty, Dipak Kumar Siddique, Mohammed Singh, Saubhagyalaxmi Mahapatra, Sheila Raj, Saurav Vedik, B. Shiva, Chandan Kumar Yadav, Sachin Yadav, Ranjeeta Tewari, Ranjana Singh, Rana Yadav, Deepika
Title:	SMART FRAMEWORK FOR PROVIDING PRIVACY AND PROTECTION IN BLOCK CHAIN BASED PRIVATE TRANSACTIONS USING CLOUD COMPUTING APPROACH
Term:	Eight years from 26 July 2021

This data is current as of 2019-08-20 18:00 AEST.
Note: If not stamped and signed, this is not a certified copy for the purposes of section 195 or 197 of the Patents Act.

Date Granted:	8 September 2021
Date Certified:	
Date of Patent:	26 July 2021
Status:	GR...
Expiry Date:	26 July 2029

Dr. Prafulla Kumar Panda,

IOT BASED FOOD WASTE RECYCLING MACHINE



ORIGINAL

सूचीNo : 131058

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE
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प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो IOT BASED FOOD WASTE RECYCLING MACHINE से संबंधित है, का पंजीकरण, श्रेणी 09-09 में 1.Dr. Tridibesh Nag 2. Dr. Subrata Biswas 3.Mr. Silpi Bose 4.Dr. Prafulla Kumar Panda 5.Krushna Chandra Sethi 6.Laxmidhar Behera के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 09-09 in respect of the application of such design to IOT BASED FOOD WASTE RECYCLING MACHINE in the name of 1.Dr. Tridibesh Nag 2. Dr. Subrata Biswas 3.Mr. Silpi Bose 4.Dr. Prafulla Kumar Panda 5.Krushna Chandra Sethi 6.Laxmidhar Behera.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्यधीन प्रावधानों के अनुसरण में।
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3.5 Book Chapter Published

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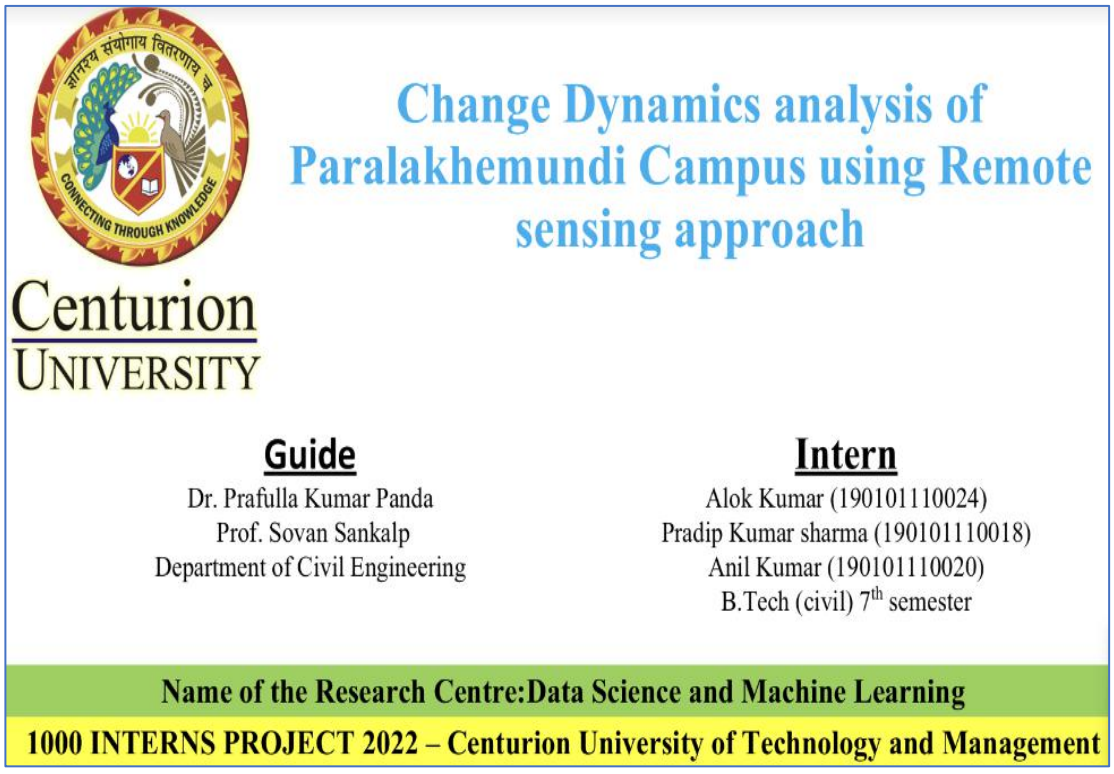
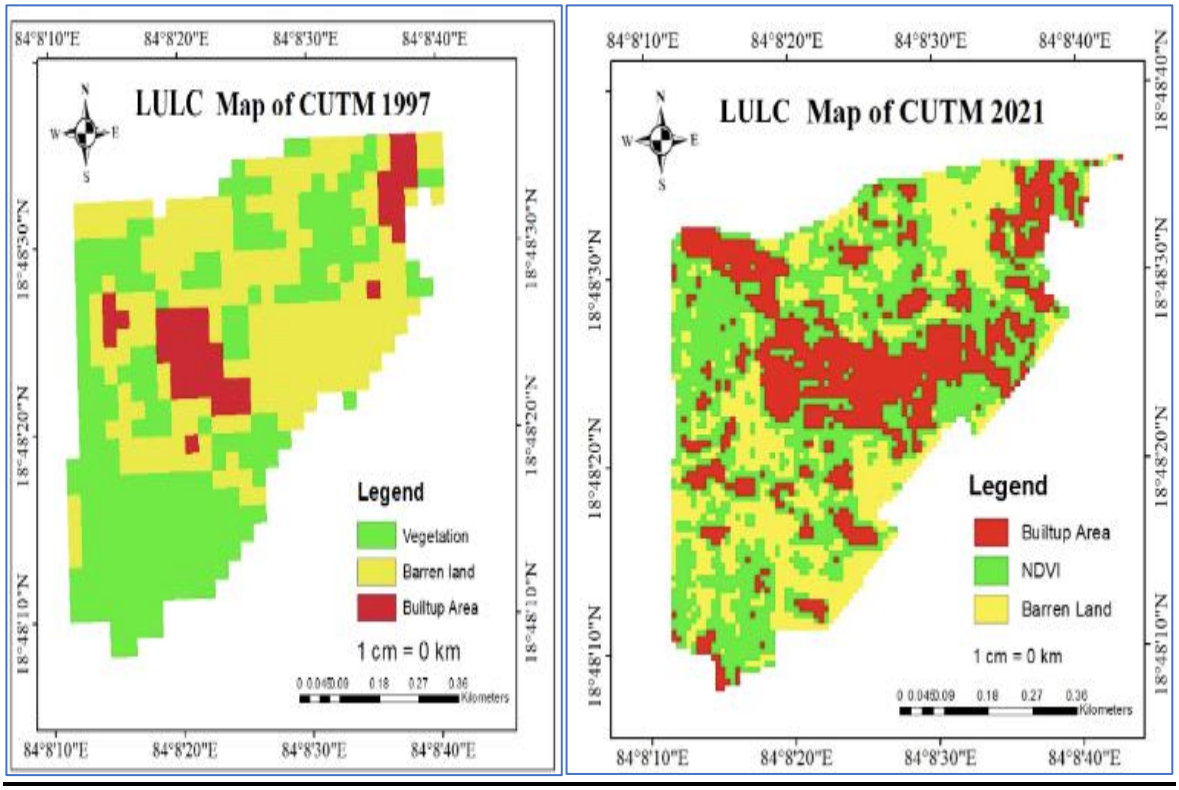
3.6 Student Internship Projects

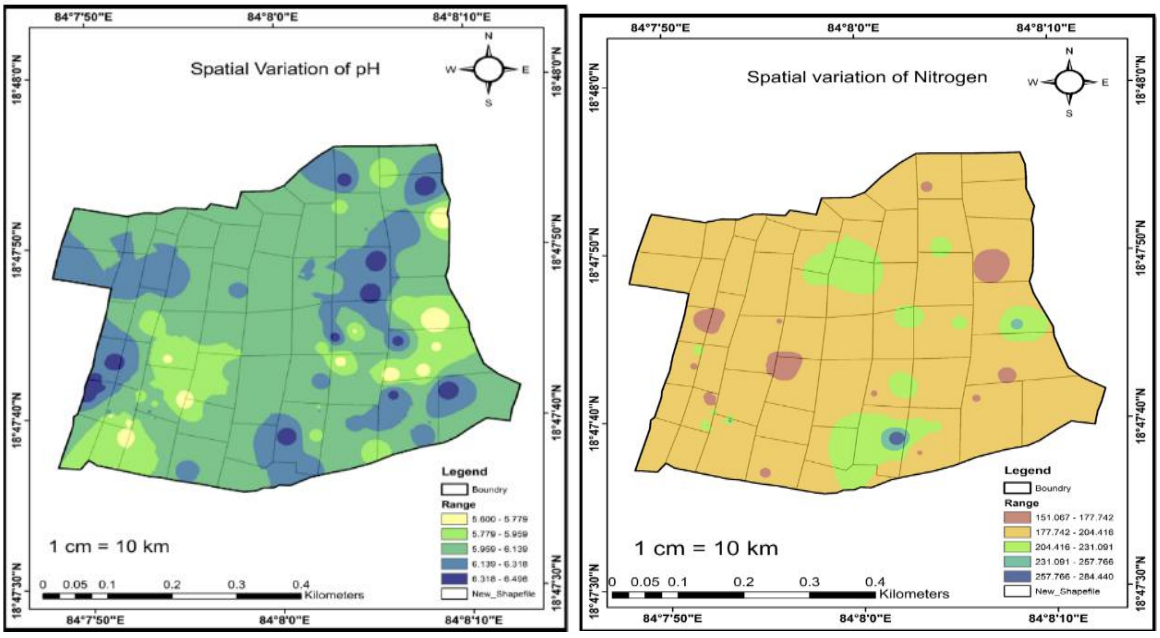


Internship Project Title with all details



Land use Land cover change observed in Paralakhemundi during 1997 and 2021

Images of Soil sample collection and lab analysis by students



Spatial variation of Soil sample properties like pH and Nitrogen

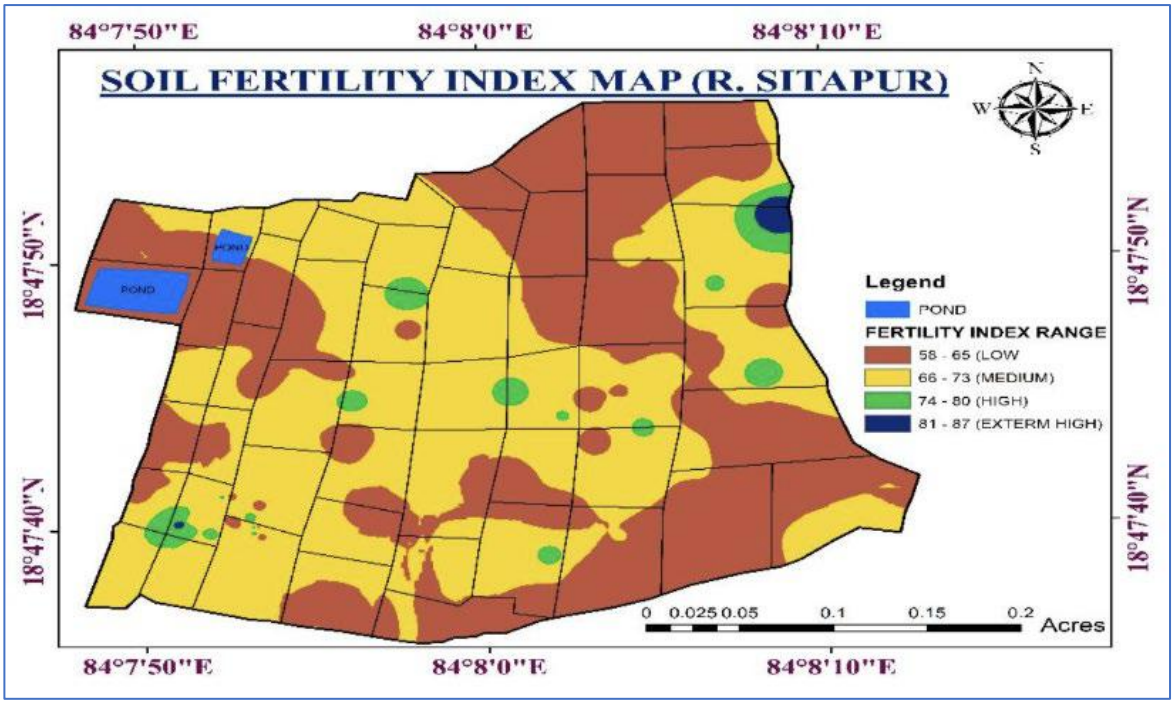


Fig 9: Soil Fertility Index map of R. Sitapur produced using Shannon Entropy and AHP method

4 Awards and Recognition

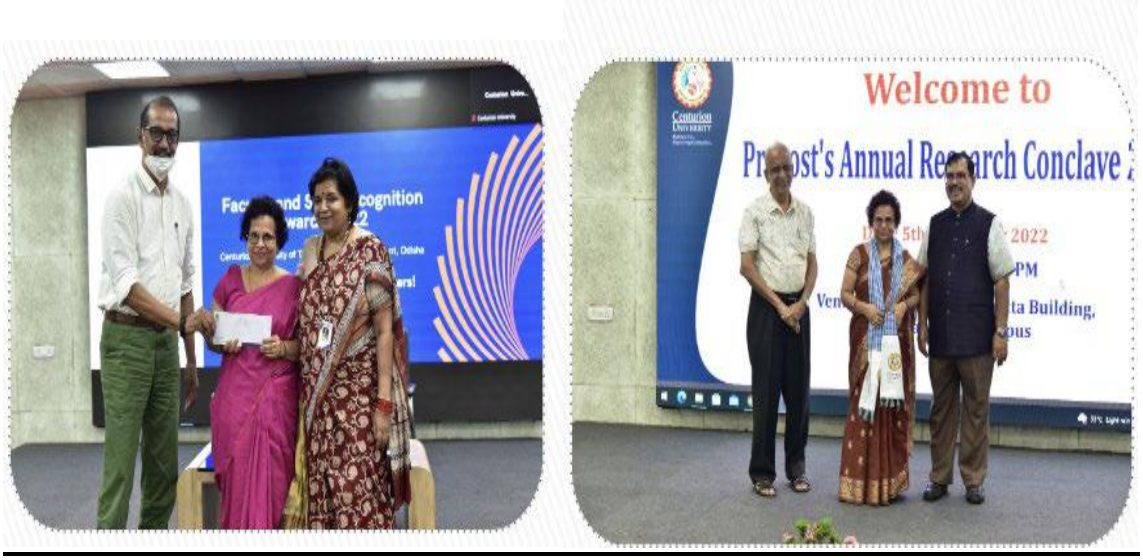
- Dr. Sujata Chakravarty Got Best Paper Award on "A Two-Tier Fuzzy Meta-Heuristic Hybrid Optimization for Dynamic Android Malware Detection", at the International Conference on Artificial Intelligence, Security and Communications, Springer ,Hosted by California State University, IIIT Kota, and Lendi Institute of Engineering and Technology, Vizianagaram on 26th November 2022
- Dr. Sujata Chakravarty received two Medal of Honour Awards, 15th August 2022, Centurion University of Technology and Management, Odisha.
- Dr. Sujata Chakaravarty received Certificate of Excellence Award, on 15th August 2022, at Centurion University of Technology and Management, Odisha
- Dr. Sujata Chakaravarty received provost award, on 15th August 2022 at Centurion University of Technology and Management, Odisha
- Received Abdul Kalam Chair Professor Award in the Provost Research Conclave – 2021 on 5th September 2021, Centurion University of Technology and Management, Odisha
- Three articles published in the year 2021 (one in SCIE and two in Scopus) have been recognized by World Health Organization (WHO) - listed on the WHO website-Global literature on coronavirus disease.
- Dr. Sujata Chakravarty, Got Jhansi Rani Laxmibai Prativa Puraskar for Technical Education and Research on 8th March 2018 at Jayadev Bhaban, Bhubaneswar, Odisha.
- Dr. Sujata Chakravarty, Editor-In- Chief, IEEE News-Letter, Bhubaneswar Sub-Section.
- Dr. Sujata Chakravarty, Elevated as a Senior Member of IEEE, Year 2014.
- Dr. Sujata Chakravarty,Elected as an Executive Committee Member IEEE Bhubaneswar Sub-section, November 2015.
- Dr.Prafulla Kumar Panda:Winner in MAPTHON competition organized by IITB-ISRO- AICTE 2020-21.
- Prof. Sovan Sankalp: Winner in MAPTHON competition organized by IITB- ISRO-AICTE 2020-21.
- Dr. Saubhagyalaxmi Singh received Certificate of Excellence Award, 15th August 2022, Centurion University of Technology and Management, Odisha.
- Dr. Mohammed Siddique received two Medal of Honour Awards, 15th August 2022, Centurion University of Technology and Management, Odisha.
- Dr.Prafulla Kumar Panda: Nodal Coordinator for ISRO outreach Programme.
- Dr.Prafulla Kumar Panda:Young Scientist Award in the International Scientist Awards on Engineering, Science and Medicine by VDGOOD,4th June 2021
- Dr.Prafulla Kumar Panda:Received 9th Science & Technology Awards-20 from, EET, India
- Dr.Prafulla Kumar Panda: Received Bharat Vikash award from ISR Year 2019.
- Dr.Prafulla Kumar Panda: Received Research Excellence Award from InSc (Institute of scholar) year 2019.
- Dr.Prafulla Kumar Panda:Received award "Award for Creative Invention" in "Research Excellence and Academic Awards" 2018, From CSERD

- Dr.Prafulla Kumar Panda: Editorial Board' for Journal (s) of 'Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP) for year 2021-22.
- Dr.Prafulla Kumar Panda:Editorial Board Member: Science Research Association (SCIREA) of Geosciences
- Dr.Prafulla Kumar Panda:Editorial Board Member: International Journal of Emerging Technology and Advanced Engineering, India
- Dr.Prafulla Kumar Panda:Editorial board Member of AR Research Publication and Conference World
- Dr.Prafulla Kumar Panda:Reviewer for Journal of Advances in Technology and Engineering Research
- Dr.Prafulla Kumar Panda:Reviewer for Advances in Science, Technology and Engineering Systems Journal (ASTESJ)
- Dr K V Sriharsha, Editorial Board Member of Applied Engineering,Science Publishing Group, USA
- Dr K V Sriharsha, reviewer of American Journal of Artificial Intelligence.,Science Publishing Group, USA
- Dr K V Sriharsha: "Best Paper Award" for the best student paper of the year at 2017 IEEE International Conference on Computational Intelligence & Computing Research,IEEE Podhigai", 2017 Dec, 14-16
- Dr K V Sriharsha: "Certificate of Appreciation", First Research Colloquium on Emerging Trends in Engineering, Science & Management and Technology", Research Colloquium during 23- 25 , March, 2018
- Dr. Mohammed Siddique, Reviewer of Journal Current Chinese Science
- Dr. Mohammed Siddique, Lifetime Member of the International Association of Engineers and Lifetime Member of Odisha Mathematical Society (OMS)
- Mrs. Saubhagyalaxmi Singh, Reviewer for Journal of Journal of Fractional Calculus and Applications, Alexandria University, Alexandria, Egypt.
- Mrs. Saubhagyalaxmi Singh, Lifetime Member of Odisha Mathematical Society (OMS) and Lifetime Member of the International Association of Engineers.
- Mr. Sonam Sandeep Dash, served as the judge for Outstanding Student Poster Award (OSPA) at AGU Fall Meeting, Washington D. C.
- Mr. Sonam Sandeep Dash, Reviewer for Journal of Hydrology, Elsevier (I.F. 5.677).
- Mr. Sonam Sandeep Dash, Reviewer for Science of Total Environment, Elsevier (I.F. 7.963).
- Mr. Sonam Sandeep Dash, Reviewer for Water Resources Management, Elsevier (I.F. 3.517).
- Mr. Sonam Sandeep Dash, Reviewer for International Journal of climatology, Willey (I.F. 4.069).

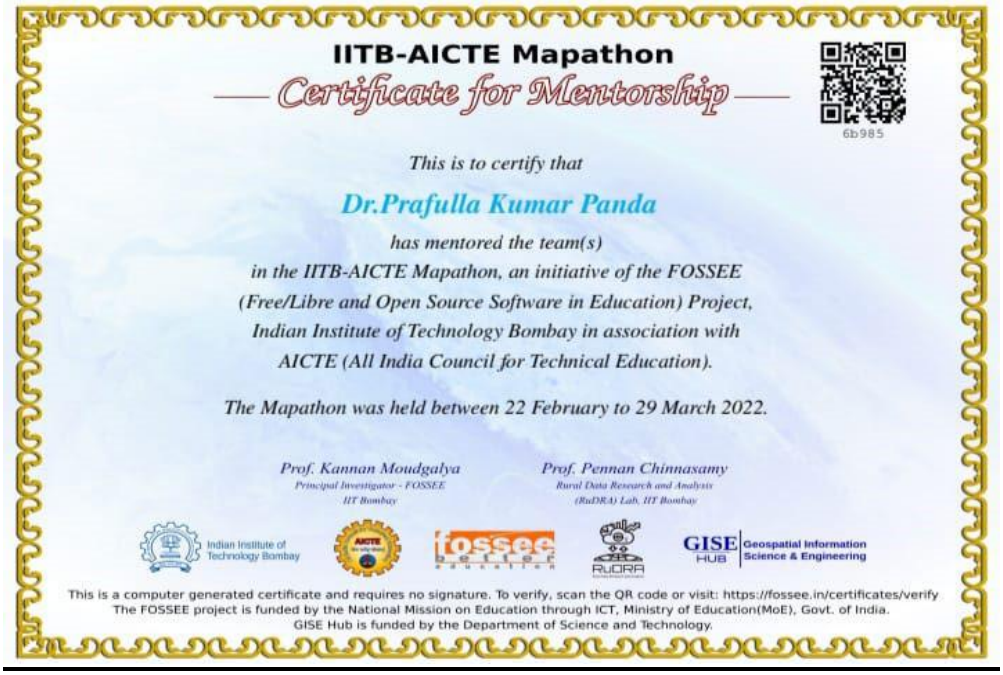
4.1 Some Glimpses of the Awards Received by Centre/Individuals

Dr. Sujata Chakravarty Got Best Paper Award on "A Two-Tier Fuzzy Meta-Heuristic Hybrid Optimization for Dynamic Android Malware Detection", at the International Conference on Artificial Intelligence, Security and Communications, Springer, Hosted by California State University, IIIT Kota, and Lendi Institute of Engineering and Technology, Vizianagaram on 26th November 2022

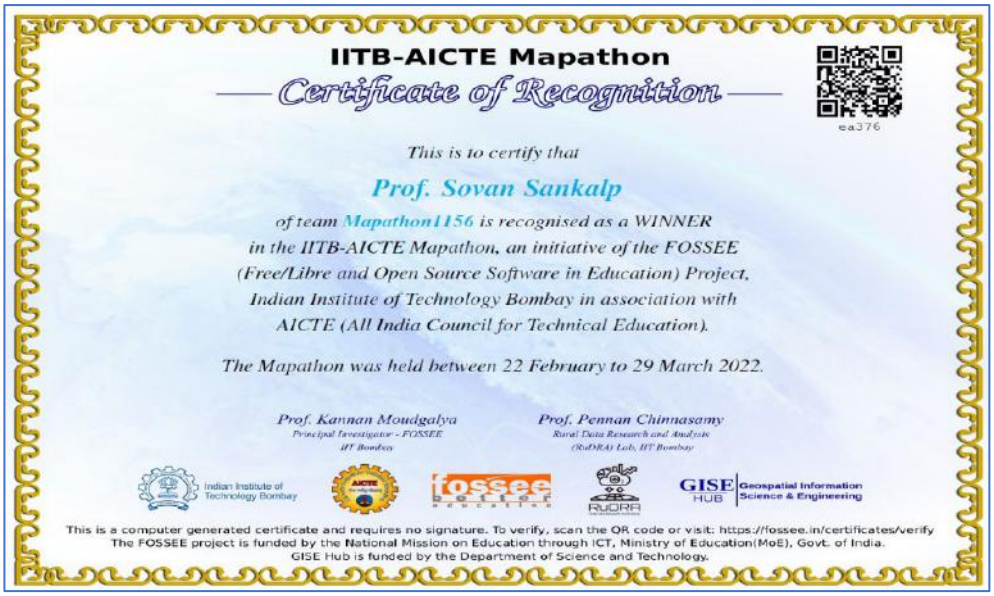
Dr. Sujata Chakravarty received two Medal of Honour Awards, 15th August 2022, Centurion University of Technology and Management, Odisha.



Dr. Sujata Chakaravarty received Certificate of Excellence Award and Provost award, on 15th August 2022 at Centurion University of Technology and Management, Odisha



Dr. Prafulla Kumar Panda award as Mentor for the winning Team



Prof.Sovan and UG Team declared Winner in Mapthon By IITB-AICTE

Dr. Saubhagyalaxmi Singh received Certificate of Excellence Award, 15th August 2022, Centurion University of Technology and Management, Odisha.

Dr. Mohammed Siddique received two Medal of Honour Awards, 15th August 2022, Centurion University of Technology and Management, Odisha.

Dr. Subrata Sarangi Completion of Refresher Course on Astronomy and Astrophysics

Dr. Prafulla Kumar Panda awarded as Winner by Esri India for GIS mapping on 20th January 2023 “My place social Contest”.

Dr. Sujata Chakravarty delivered a talk on "Compliance and Challenges of COVID-19 on Research and Innovation" in International WOmen in Engineering COVID 19 Congress 2021.

Dr. Sujata Chakravarty "Jhansi Rani Laxmi PrativaPuraskara" from Sri Prafulla Samal, Honourable Minister of Child & Development and Mission Shakti, SS & EPO, MSME, Govt of Odisha on 7th March 2018

Creative Invention Award to Prof. Prafulla Kumar Panda in Research Excellence and Academic Awards in 2018, by CSERD

Bharat Vikash Award to Prof. Prafulla Kumar Panda

Young Scientist Award 2021 to Prof. Prafulla Kumar Panda

Prof. Prafulla Kumar Panda Invited as Speaker to Geoscience Conference at London

Dr. Sujata Chakravarty given a talk on "Research Methodology- how to write a technical paper"", Utkal University Vanivihar, 8th November 2020

Dr. Sujata Chakravarty getting Memento after giving a talk at ITR Chandipur from Dr B K Das, Outstanding Scientist, Director of ITR

GIS Day 2021 Winner declared by ESRI India

5 FDP/Workshops/Seminars/Conferences organised and attended by Faculties

Conferences organised and attended by Faculties

1) **Saubhagyalaxmi Singh, (2022): Geometric Block Sequence Spaces, Journal of Odisha Math. Society, 40(01-02), 83-98.**

2) **Prafulla Kumar Panda, Sovan Sankalp, Bibhuti Bhusan Sahoo, Kundan Kumar and Avijeet Raj (2023): Soil Properties Analysis using Geospatial approach-A case study of R.Sitapur, Odisha. Esri India User Conference, Kolkata.**

3) **Vetrimani Elangovan, Dhawaleswar Rao C.H., ARUL PRASATH A, G.Padmapriya. (2022.) Using the Cooperative Nodes for Diminishing the Packet Drops in Mobile WSN. IOP Journal of Physics Conference Series (ISSN 1742-6588).**

4) **G.Padmapriya, ARUL PRASATH A, Vetrimani Elangovan, Dhawaleswar Rao C.H. (2022). A Data Mining Approach for Full Text Analysis Based Information Retrieval. IOP Journal of Physics Conference Series (ISSN 1742-6588).**

5) **Subbarayudu, A., Chandra Sekhar. CH., Dhawaleswar Rao C.H. (2022). Remote Cloud Computing Services Complex Processes for Network Control Infrastructure. IOP Journal of Physics Conference Series (ISSN 1742-6588).**

5.1 FDP conducted/attended by the faculties

FDP on

Artificial Intelligence, Machine Learning and Video Processing

Prof Dr. Sujata Chakravarty, HOD CSE

SoET, CUTM, Bhubaneswar

June 12 to June 23 2021

Week – 1

Day	Date	Topic		Resource Person/Faculty
Day-1	12th June 2021, Saturday	Artificial Intelligence and its Applications: Financial Engineering; Biomedical Data Classification; Smart Agriculture		Dr. Sujata Chakravarty
Day-2	14th June 2021, Monday	K-means Clustering Algorithm		Dr. Dillip Rout
Day-3	15th June 2021, Tuesday	Person Real Height Estimation Using ML		Dr. K V Sriharsha
Day-4	16th June 2021, Wednesday	Bio-Inspired Computing Techniques: Genetic Algorithm		Mr. Debraj Rana
		Video Processing using Python		Ms. Shivani Nanda
Day-5	22th June 2021, Tuesday	Session-1	Digital Mammogram Classification	Dr. Figlu Mohanty


Artificial Intelligence and its Applications: Financial Engineering; Health Care; Smart Agriculture
Dr. Sujata Chakravarty, Senior Member IEEE
Professor & Head
Dept. of Computer Science & Engineering
Coordinator: Center for Data Science & Machine Learning
Centurion University
Centurion University of Technology &Management, Odisha
IEEE


CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Paralakhemundi Campus,
Village Alluri Nagar, Gajapati,
Odisha, India – 761211,
+91 82600 77222
https://cutm.ac.in/
Centurion University is duly recognized as a pioneer is "Skill Integrated Higher Education". Its unique model lays specific emphasis on creating sustainable livelihoods on a national scale in challenging geographies through education that results in employability and sparks entrepreneurship. This model has been recognized by multiple Governments (Central and State), International Organizations such as UNESCO and the World Bank as well as Policy Think-tanks such as the Niti Ayog. Recently, Centurion University's School of Vocational Education and Training has been recognized as a Centre of Excellence by Ministry of Skill Development and Entrepreneurship, Government of India. It is the only University in India to be recognized as such.
Centurion has embraced the Agenda for Sustainable Development and the associated Sustainable Development Goals (SDGs) since being formally announced in 2015. Whilst having an indirect impact and contribution on almost all 17 SDGs, Centurion has specifically focused on 9 SDGs and embedded it in everything from its strategy, governance, institutional management, and outcomes.
ABOUT THE DEPARTMENT
The department of Computer Science and Engineering is providing a study that ranges from topics dealing with the theoretical studies of algorithms and information to the practical issues of implementing computing systems in both hardware and software. Practicing real-time, industry-used tools, languages and algorithms, the curriculum is designed in partnership with the industry and adheres to dynamic syllabus making – AI & ML, Data Science and Warehousing, Software Technology, Cyber Security, Cloud Computing, High Performance Computing, ARVR and Gaming. The department has academic partnerships with Unity, Unreal, AWS, Dassault Systems, and many other cutting-edge technology companies. Industry certifications are also integrated into the curriculum, preparing students to be the workforce of the future.
The Objectives of the Department:
The programme is designed to enable students to:
- Gain sufficient knowledge and understanding of the appropriate scientific and mathematical fundamentals necessary to develop their professional skills.
- Be proficient in integrating knowledge and applying their understanding in identifying problems and producing powerful solutions.
The Key Highlights of the Department:
- Opportunities to pursue multi-disciplinary areas such as smart infrastructure, e-mobility, and digital design using digital technologies (AI/ML, IoT, Analytics and AR/VR)
- 100% support for placements through counselling and training.
- Opportunity to do industrial internships as well as work in industry class on-campus manufacturing operations.
FACULTY DEVELOPMENT PROGRAMME
ON
NATURAL LANGUAGE PROCESSING
[Applications: INFORMATION RETRIEVAL, NEURAL MACHINE TRANSLATION]
(Online mode with Hands on)
4th-6th April, 2023
ORGANIZED BY
DEPT. OF COMPUTER SCIENCE & ENGG.
AND
CENTRE FOR DS & ML

No: ATAL/2021/1627221915

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that TUFLEUDDIN BISWAS, Assistant Professor of Centurion University of Technology and Management participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Statistical Foundations of Data Science and Machine Learning" from 27/10/2021 to 31/10/2021 at Institute of Chemical Technology, Mumbai.

Advisor-I, ATAL Academy
Mamta Rani Agarwal

Coordinator

IMI
INTERNATIONAL MANAGEMENT INSTITUTE
BHUBANESWAR

Certificate of Participation

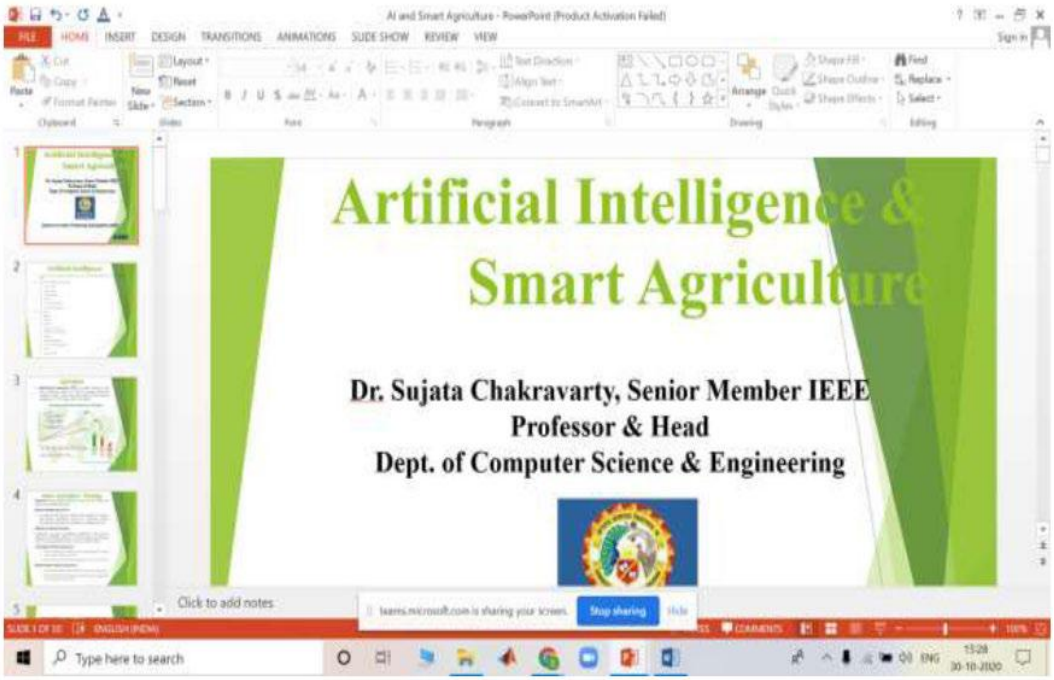
This certificate is presented to Dr. Tufleuddin Biswas in recognition of his participation in Online Research FDP on

"MCDM Methods in Research"

on 17 February 2023.

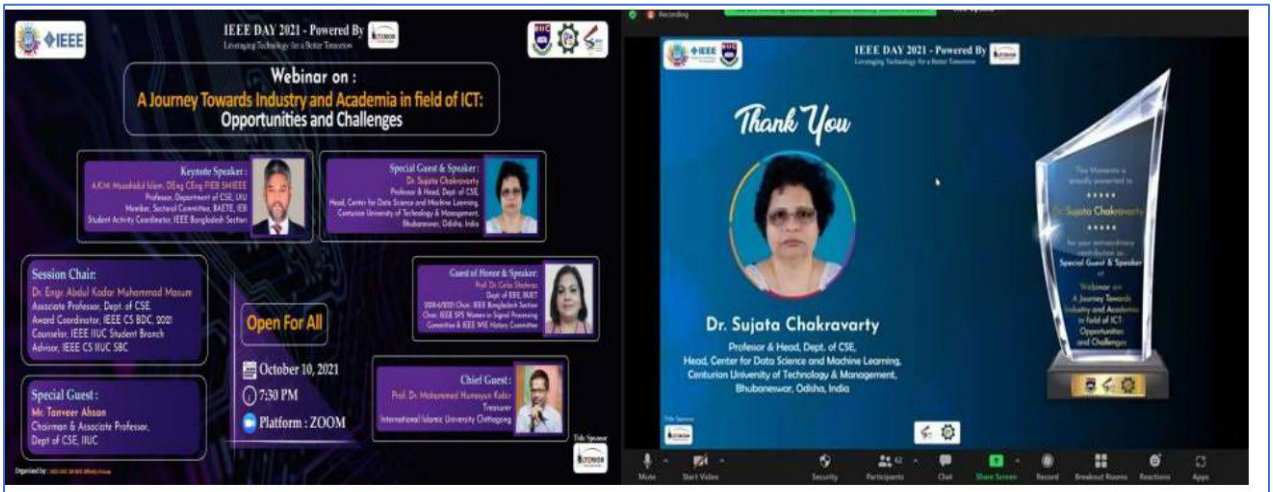
PROF. RANJIT ROY GHATAK
PROGRAMME DIRECTOR

PROF. RAMESH BEHL
DIRECTOR - IMIB



Delivered a talk on Artificial Intelligence and Smart Agriculture in FDP, CMRIT, AP on 30th October 2020

5.2 Webinars conducted/participated by the Domain



Delivered a talk on "Artificial Intelligence in Smart Agriculture" in an Webinar on "A Journey Towards Industry and Academia in the field of ICT: Opportunities and Challenges"" Organized by IEEE IIUC Student Br[illegible] WIE Affinity Group, Bangladesh, 10th October 2021

GATI
Gender Advancement for Transforming Institutions

NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA

DST@50 1971-2021 DEPARTMENT OF SCIENCE & TECHNOLOGY

CERTIFICATE OF PARTICIPATION

Five-Day Webinar Series

on

Advances in Water Resources Engineering (AWRE-2022)

(Sponsored by Gender Advancement for Transforming Institutions, DST)

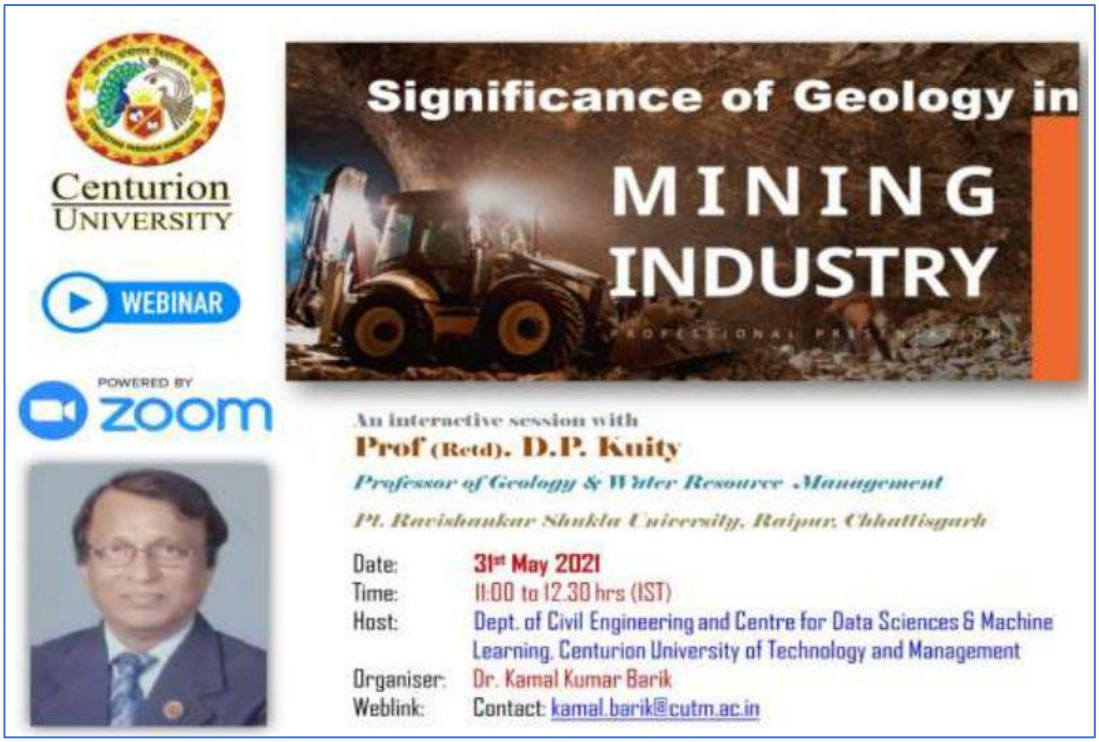
This is to certify that

Sovan Sankalp, CUTM, Odisha

has participated in the Five-Day Webinar Series on Advances in Water Resources Engineering (AWRE-2022) organized by the Department of Civil Engineering, NIT Rourkela during 15th to 19th February 2022.

Dr. S. N. Sahoo
Dr. Sanat Nalini Sahoo
Coordinator, AWRE - 2022

Prof. Chittaranjan Patra
Chairman, AWRE - 2022


Centurion University
WEBINAR
POWERED BY zoom
Significance of Geology in
MINING INDUSTRY
An interactive session with
Prof (Retd). D.P. Kuity
Professor of Geology & Water Resource Management
Pt. Ravishankar Shukla University, Raipur, Chhattisgarh
Date: 31st May 2021
Time: 11:00 to 12.30 hrs (IST)
Host: Dept. of Civil Engineering and Centre for Data Sciences & Machine Learning, Centurion University of Technology and Management
Organiser: Dr. Kamal Kumar Barik
Weblink: Contact: kamal.barik@cutm.ac.in


Centurion University
Webinar on "Drone Applications and Beyond"
Host: Department of Civil Engineering, Centre for Data Science and Machine Learning & Centre for Innovator and Entrepreneurs (CIE), Centurion University of Technology and Management (Odisha)
4th June 2021 from 3:30 PM to 5:00 PM
Speakers
Mr.Harirajan S
UAV Pilot and Geo spatial Scientist
Zain drone, Kuwait
Mr.Sabarinathan N
Geospatial Engineer and Certified Commercial RPAS Pilot
Middle East Survey Engineering, Dubai
Coordinator: Dr.Prafulla Kumar Panda
Registration link: https://forms.gle/JveE6EBEDz5Tm9eC6
Shaping Lives... Empowering Communities...


Webinar on
"Advancement of Radar Remote Sensing Technique for Earth's Surface Deformation Monitoring"
11th June 2021 from 4.00 PM to 5:30 PM
Organized By: Department of Civil Engineering, Centre for Data Science and Machine Learning & Centre for Innovator and Entrepreneurs (CIE), Centurion University of Technology and Management (Odisha)
Speaker
Dr. Chandrakanta Ojha
Dept of Earth and Environmental Sciences
Indian Institute of Science Education and Research (IISER), Mohali
Coordinator
Dr. Prafulla Ku Panda
Email:prafullapanda@cutm.ac.in
Registration Link:https://forms.gle/h4Gq8BEq8VsEN3i9A
Google meet link: http://meet.google.com/wwc-auzk-rwe
Centurion University of Technology and Management, Odisha


ORGANIZING COMMITTEE
Dr. Sujata Chakravarty
(Ph.D)
---CONVENOR---
Dr. Sisir Ranjan Dash
(MA,MBA,UGC NET,Ph.D)
---MEMBER---
Dr. Sabyasachi Dey
(MBA, UGC NET Ph.D)
---MEMBER---
Dr. Soumik Ray
(Ph.D)
---MEMBER---
Mr. Sandeep Jena
(M.com, MBA, MA)
--CO-ORDINATOR--
Register Here
CENTURION UNIVERSITY
ANALYTICS
MARKETING ANALYTICS
WEBINAR SERIES ON "MARKETING ANALYTICS".
BY
CENTER OF DATA SCIENCE & AI/ML
SESSION 1 - 31ST JULY,2021 AT 7.30 P.M - 8.30 P.M
TOPIC - APPLICATION OF ANOVA IN MARKETING ANALYTICS
8249163136

Indian Society of Agrophysics
and
Division of Agricultural Physics
ICAR-Indian Agricultural Research Institute
New Delhi

Certificate of Participation

This is to certify that TUFLEUDDIN BISWAS of Centurion University of Technology & Management, Odisha (India) has participated and presented a paper entitled "PROMETHEE-GAIA multicriteria decision making method for evaluating performances of different rice-based cropping systems under conservation agriculture" in ORAL in the National Seminar on Agrophysics for Smart Agriculture held at NASC Complex, New Delhi from 22-23 February 2022.

Pragati Pramanik Maity
Secretary, ISAP

S. K. Chaudhari
President, ISAP

5.3 Workshops conducted/participated by Domain members

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

Centurion UNIVERSITY
Shaping Lives... Empowering Communities...

CERTIFICATE

OF APPRECIATION

THIS IS CERTIFIED THAT

Dr. Soumik Ray, Assistant Professor, MSSSoA, CUTM

organised and participated successfully "3-DAYS
HANDS-ON TRAINING ON RESEARCH DATA ANALYSIS USING "R" PROGRAMMING"
organized by Department of Agricultural Economics and Statistics
in collaboration with Centre for Data Science and Machine Learning
FEBRUARY 24-26, 2023

M. DEVENDER REDDY
DEAN (ACADEMIC), MSSSOA

SUJATA CHAKRAVARTY
RC COORDINATOR, DSML

Certificate ID: WRDM/2023/ISR-1312/64

CERTIFICATE

OF PARTICIPATION

This certificate is awarded to

SOVAN SANKALP

For active participation in the National Workshop on "***Water Resources Assessment Under Climate Uncertainties***" on **17th March 2023** organized by the Department of Water Resources Development and Management, Indian Institute of Technology Roorkee and sponsored by Indian Space Research Organisation under ISRO-RESPOND Programme

Dr. V.M. Chowdary
GD (ASAG) RSAA, NRSC Hyderabad

Dr. Ashish Pandey
Professor and Principal Investigator

Sl. No.: /

NATIONAL INSTITUTE OF DISASTER MANAGEMENT

(Ministry of Home Affairs, Govt. of India)

New Delhi

CERTIFICATE

This is to certify that

Sovan SANKALP

has participated in the online training on **"Drought and Flood Analysis and their Management"** from **14 Apr 2022** to **18 Apr 2022** organized by **National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India** in collaboration with **Motilal Nehru National Institute of Technology Allahabad**

Dr H.K.Pandey	Dr Pramod Soni	Dr R.P. Singh	Taj Hassan, IPS
Associate Professor	Associate Professor	Professor	Executive Director
MNNIT Allahabad	MNNIT Allahabad	MNNIT Allahabad	NIDM

Centurion University

MANAGE

NABARD

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

Odisha, India

MS SWAMINATHAN SCHOOL OF AGRICULTURE

(Accredited by ICAR)

Certificate of Appreciation

This is to certify that ***Dr. Tufleuddin Biswas*** *Department of Agrl. Economics ans Statistics, has* ***participated*** *and* ***organized*** *the National Workshop on* **"Agri - entrepreneurship: Cutting - edge Approaches to Create a Path to the Future"**, *jointly organized by the* ***Department of Agricultural Economics and Statistics & Centre for Governance and Sustainable Societies,*** *at Centurion University of Technology and Management, held on 04 - 06 April, 2023.*

Organizing Secretary	Organizing Secretary	Dean, Admin	Dean	Registrar
MSSSoA, CUTM	MSSSoA, CUTM	MSSSoA, CUTM	MSSSoA, CUTM	CUTM

Centurion UNIVERSITY

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Odisha, India

MANAGE

NABARD

MS SWAMINATHAN SCHOOL OF AGRICULTURE
(Accredited by ICAR)

Certificate of Appreciation

This is to certify that ***Dr. Soumik Ray*** *Department of Agrl. Economics ans Statistics, has* ***participated*** *and* ***organized*** *the National Workshop on* **"Agri - entrepreneurship: Cutting - edge Approaches to Create a Path to the Future"**, *jointly organized by the* ***Department of Agricultural Economics and Statistics*** *&* ***Centre for Governance and Sustainable Societies,*** *at Centurion University of Technology and Management, held on 04 - 06 April, 2023.*

Organizing Secretary	Organizing Secretary	Dean, Admin	Dean	Registrar
MSSSoA, CUTM	MSSSoA, CUTM	MSSSoA, CUTM	MSSSoA, CUTM	CUTM

Centurion University of Technology and Management

Department of Civil Engineering

Workshop on Dam Break Modelling Using HEC RAS

(3rd to 5th August 2021)

Agenda

Day-1: 10 am to 1pm

- Introduction about the workshop.
- Dam Break Modelling & Its importance.
- Various websites for data collection.

Day-1: 2 pm to 5pm

- Different approaches & Ideas for UG Projects.
- Introduction to Shapefile, DEM & its set up in Arc-Gis.
- How to download DEM?

Day-2: 10 am to 1pm

- Input file Preparation for HEC-RAS
- Hydrograph
- DEM mosaic , Mask & Extraction

Day-2: 2 to 5pm

- Demo HEC-RAS Model Run (2D), Unsteady by resource persons.
- Project and Assignments

Day-3: Day-1: 10 am to 1pm and 2 pm to 5pm

- HEC-RAS Model Run (2D)
- Student Project
- Project and Assignments reviews

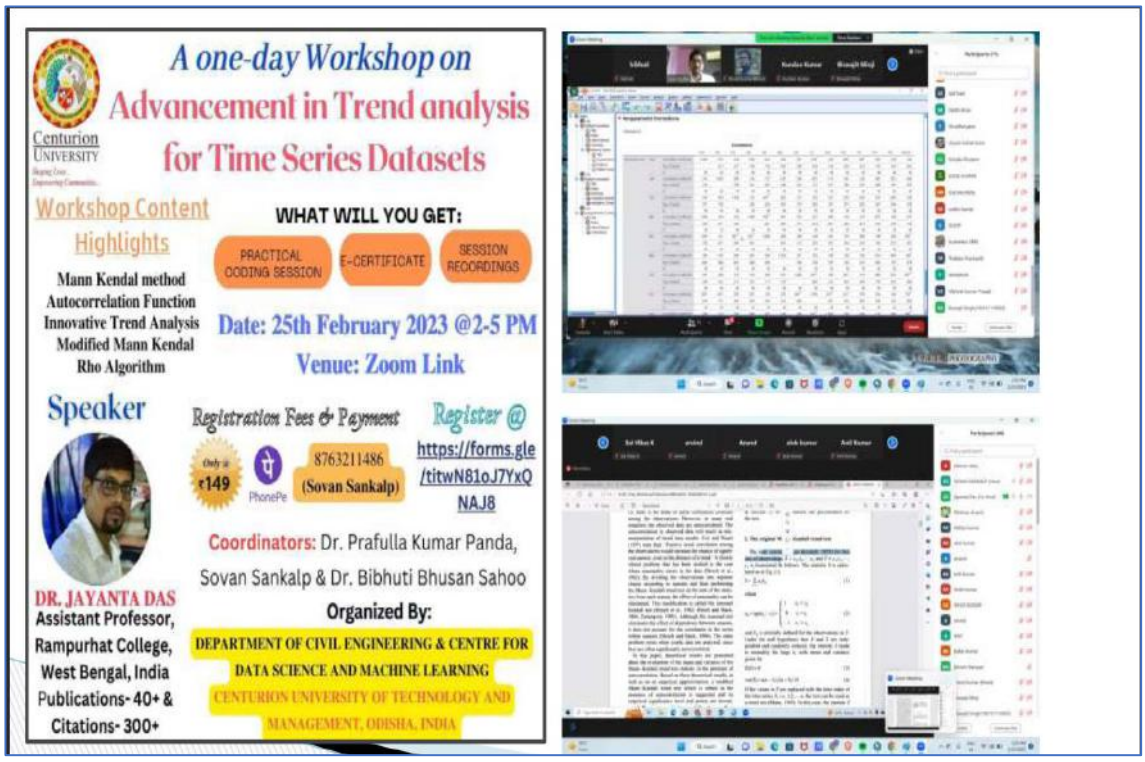
Recourse Team Details

Dr.Prafulla Kumar Panda (CUTM), Dr.Kamal Kumar Barik(CUTM), Rosysmita Bikram Singh((NIT Rourkela), M.Uma Maheswar Rao(NIT Rourkela), Satya Narayana Bhuyan((NIT Rourkela)

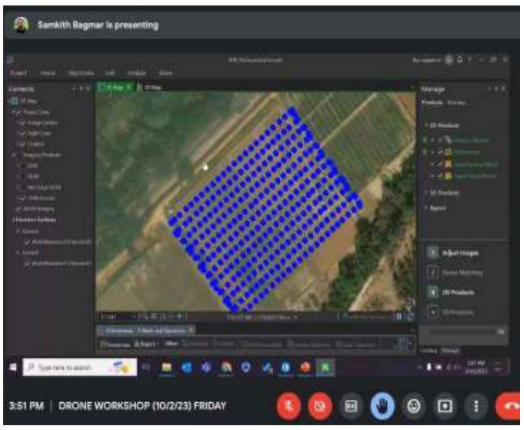
N.B: One hour lunch break (1 to 2pm)

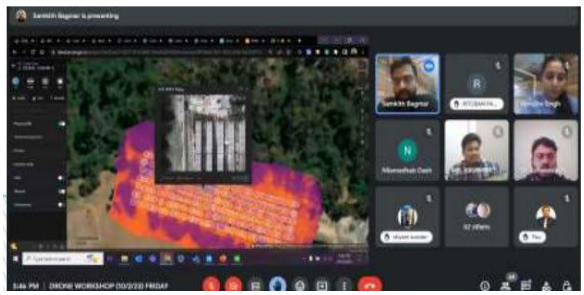
Delivered a talk on "Machine Learning and Financial Engineering", AIET, Bhubnaeswar, TEQIP-III, BPUT Odisha, National Workshop on Recent Advancement in Machine Learning and Computer Network- 2021, 6th March 2020

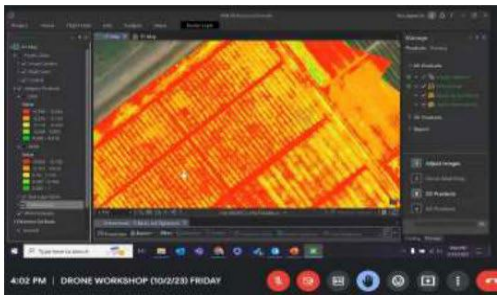
Workshop on Drone Image Processing



Workshop on Trend Analysis for Time series Datasets







Workshop on Drone Technology in Precision Agriculture

Workshop on Hyperspectral RS and its Application attended by Dr.Prafulla

Workshop attended as Resource person by Dr.Prafulla at Utkal University

IIRS-ISRO OUTREACH PROGRAMME

Certificate of Participation

PRESENTED TO

DR. PRAFULLA KUMAR PANDA

FROM

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA

FOR HIS/HER PARTICIPATION

IN ANNUAL IIRS OUTREACH MEET &

IIRS ACADEMIA MEET

ON

27-28 MARCH 2023

THROUGH

IIRS-ISRO OUTREACH PROGRAMME AS A COORDINATOR OF NETWORK INSTITUTE

HARISH C. KARNATAK
HEAD, GIT&DL, IIRS

R.P. SINGH
DIRECTOR, IIRS

DATE: 28 MARCH, 2023
PLACE: DEHRADUN

IIRS-ISRO Outreach Programme meet attended by Dr. Prafulla at Dehradun.

5.4 Conferences conducted/participated by Domain members

CERTIFICATE

International Online Conference on Materials Science and Technology (ICMT 2021)
12th - 14th November 2021 Kottayam, Kerala, India

Organized by

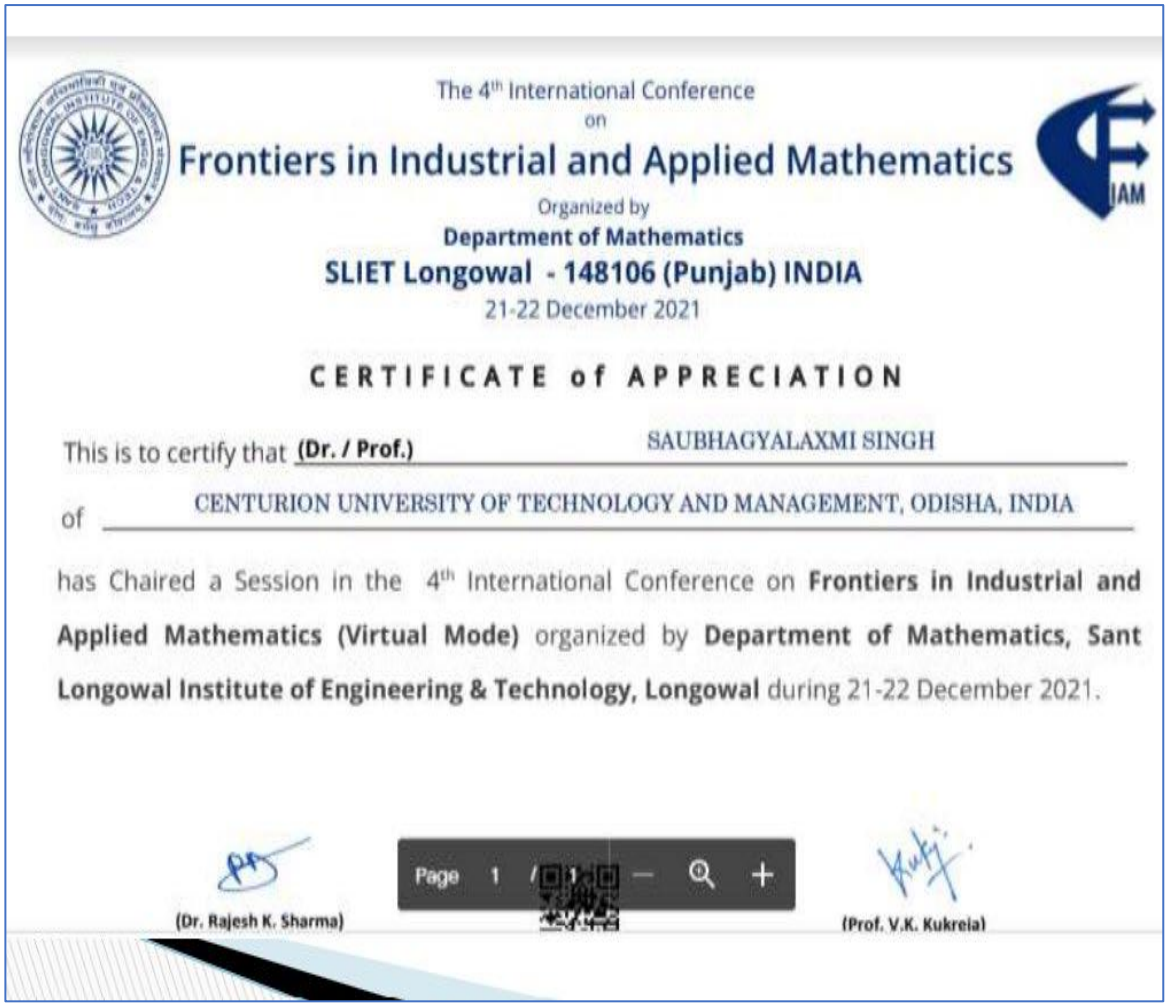
Mahatma Gandhi University, Kottayam, Kerala, India
&
Gdansk University of Technology, Gdansk, Poland
&
Wroclaw University of Technology, Wroclaw, Poland

This is to certify that **Dr. Prafulla Kumar Panda, Associate Professor and Head, Department Civil Engineering, Centurion University of Technology and Management, Odisha, India,** has chaired a session at the International Online Conference on Materials Science and Technology (ICMT 2021) 12th-14th November 2021, Kottayam, Kerala, India.

DIRECTOR
SCHOOL OF ENERGY MATERIALS
MAHATMA GANDHI UNIVERSITY
P.D. Hills P.O., Kottayam- 686 560
Kerala, India

Prof. Dr.Sabu Thomas
CHAIRMAN
ICMT 2021, INDIA

Dr. Prafulla Panda chaired a session at ICMT 2021, Kerala



The 4th International Conference
on
Frontiers in Industrial and Applied Mathematics
Organized by
Department of Mathematics
SLIET Longowal - 148106 (Punjab) INDIA
21-22 December 2021

CERTIFICATE of APPRECIATION

This is to certify that (Dr. / Prof.) SAUBHAGYALAXMI SINGH

of CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA, INDIA

has Chaired a Session in the 4th International Conference on **Frontiers in Industrial and Applied Mathematics (Virtual Mode)** organized by **Department of Mathematics, Sant Longowal Institute of Engineering & Technology, Longowal** during 21-22 December 2021.

(Dr. Rajesh K. Sharma)

(Prof. V.K. Kukreja)

Dr. Saubhagyalaxmi Singh chaired a session at FIAM 2021, Longowal

CERTIFICATE OF PARTICIPATION

esri

HEREBY CERTIFIES THAT

Dr. Bibhuti Bhusan Sahoo

of

Centurian University of Technology and Management, Odisha

has chaired a session on "*Geospatial Analysis and Mapping*" in GIS DAY 2022 Celebration Event, at Centurion University of Technology & Management, Odisha, India on 16th November 2022.

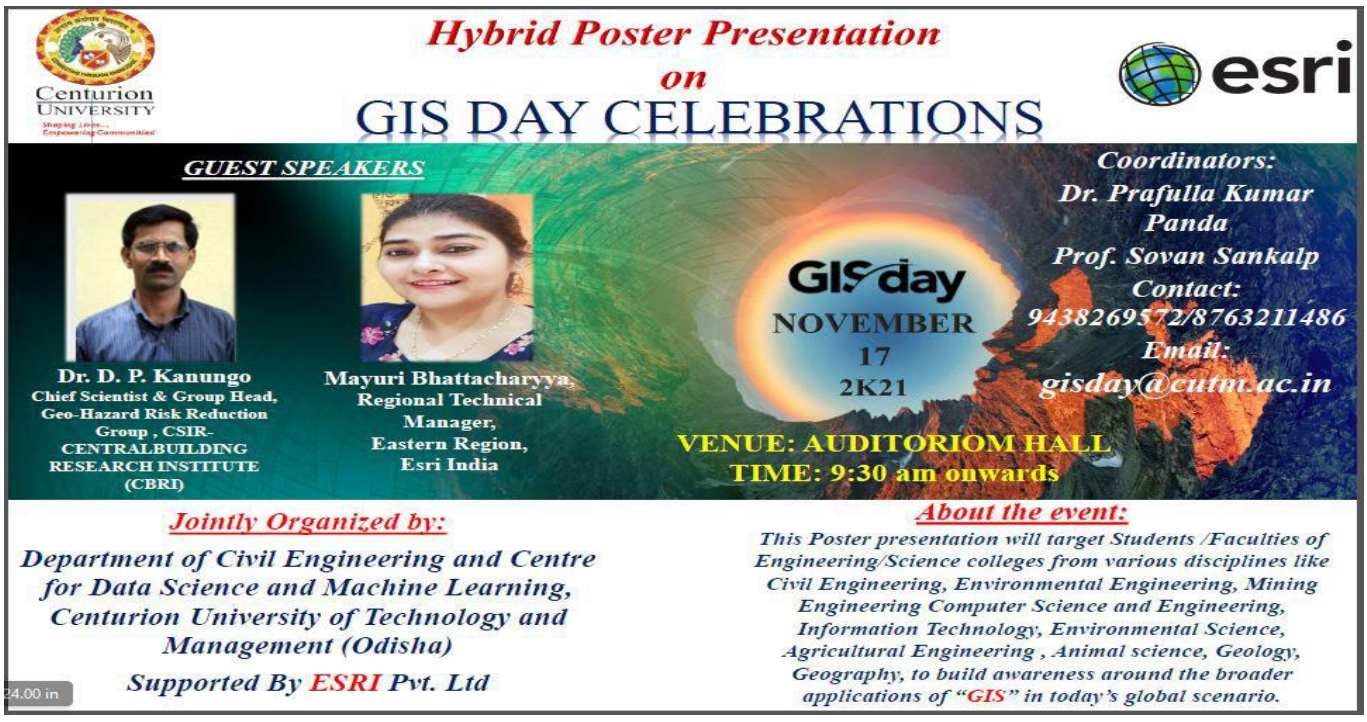
Dr. P. K. PANDA
CONVENER

GIS DAY 2022

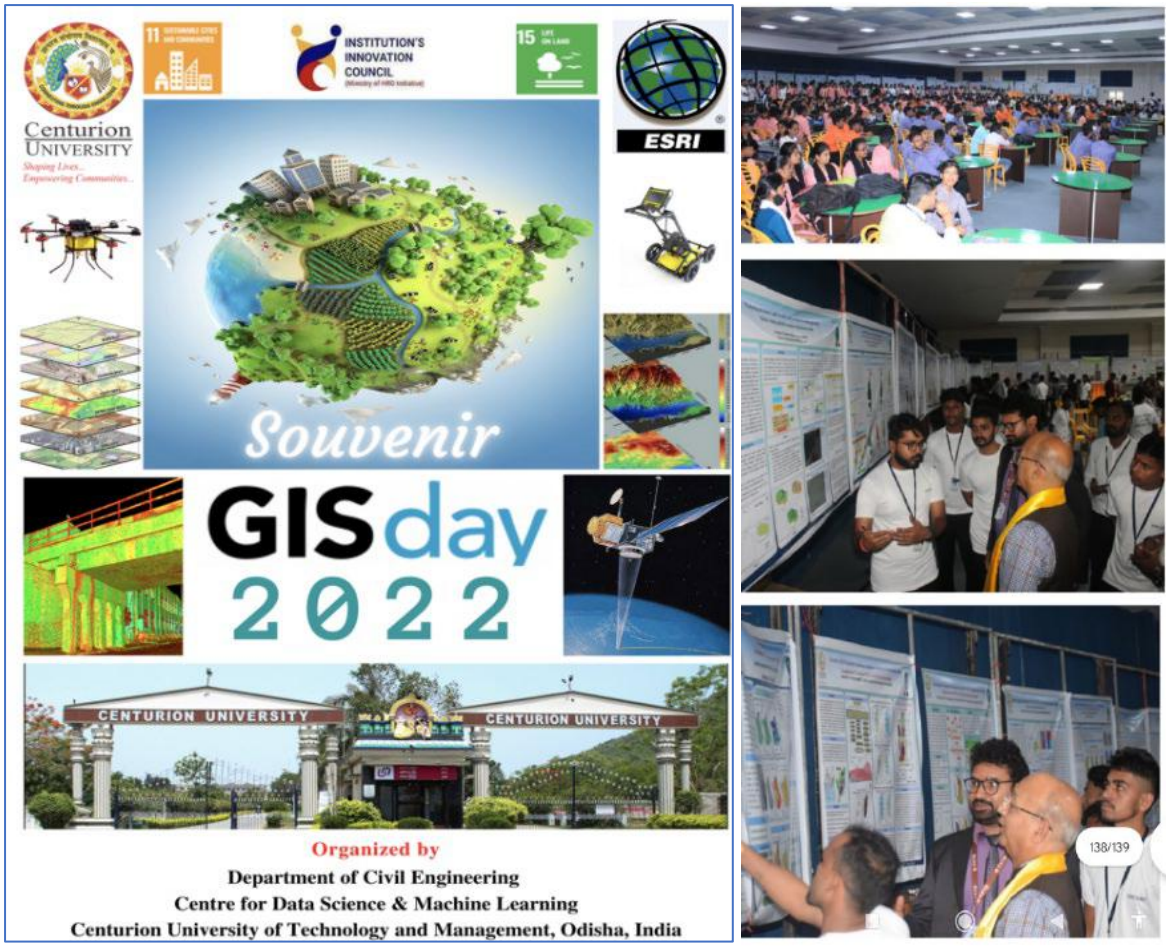
Dr. ANITA PATRA
REGISTRAR

Dr. Bibhuti Bhusan Sahoo chaired a session at GIS Day 2022, Paralakhemundi

Delivered a talk on Application of Machine Learning in Financial Engineering at "Women in Machine Learning and Data Science (WiMLDS)", Hyderabad Chapter



GIS Day 2021 Event Celebration



GIS Day 2022 Event Celebration

ESRI User Conference attended by Dr. Prafulla and Prof. Sovan at Kolkata

Administrative Staff College of India
Leadership through Learning

Centre for Innovations in Public Systems

Certificate of Participation

SUMMIT
ON
SMART INNOVATIONS IN THE POST - PANDEMIC ERA

December 27 - 28, 2021

This is to certify that

Sovan Sankalp

has participated in the Summit

Valli Manickam
Valli Manickam
Dean of Training Programmes, ASCI

C. Achalender Reddy
C. Achalender Reddy
Director, CIPS

Nirmalya Bagchi
Nirmalya Bagchi
Director General (I/c), ASCI

ASCI Summit attended by Dr. Prafulla and Prof. Sovan in Virtual mode

International Conference on
Climate Resilient Construction and Building Materials
(ICCRCBM – 2023)
&
Prof. Leon Black and Prof. Biswajeet Bhattacharjee Symposium
March 3rd – 5th, 2023

University of East London

Supported by

Royal Academy of Engineering

Publication Partner

Springer

Associated Institutions

NIT Calicut

NIT Srinagar

Associated Professional Institutions

To, **Date**:15/02/2023

"Arpan Pradhan [1,*], Sovan Sankalp [2], Sirisha Uppaluri [1], Shibu K Mani [1]"

Email ID: "dr.arpanpradhan@gmail.com"

Sub: Acceptance of your full-length paper

Ref ID: CRCBM_303 Date of submission: 14/02/23

Dear Sir/Madam,

I am glad to inform you that your paper titled "**Evaluating the Productivity of Rainwater Harvesting Technique in Lowering Surface Runoff over Indian Urban Cities**" has been accepted for **paper** presentation at ICCRCBM 2023.

Look forward to seeing you at NITK Surathkal.

Thanking you with best regards

Bibhuti Bhusan Das
Associate Professor, Department of Civil Engineering,
NITK Surathkal, Mangalore - 575 025, Karnataka, India.
Phone no: +91-9589200861 (M), 0824-2473970 (L).
E-mail: crcbm.nitk@gmail.com, bdas@nitk.ac.in

Conference Committee

Chief Patron:
Prof. Prasad Krishna
Director (Additional-charge), NITK

Patron:
Prof. B. R. Jayalekshmi
Head of Civil Engineering, NITK

Conference Chairman
Dr. Leon Black
Leeds Univ., UK

Organizing Chair:
Dr. Bibhuti Bhusan Das
NITK

Technical Chair
Dr. Salim Barbhuiya
Univ. of East London, UK

Secretary
Dr. Parmeshwar Hiremath
NIT Srinagar

Conference Coordinators
Dr. Shivaprasad K N
JSS Univ, Mysore
Dr. Sharan Kumar Goudar
NIT Calicut
Dr. Snehal K
IIT Chennai

Prof. Sovan Sankalp got a manuscript accepted in HYDRO 2022 Conference, Punjab

5.5 ISRO Outreach Programmes (Running Certification Programmes)

Sl. No	Course name	Duration	No of Participants Registered	No of participants succeed	Coordinator
1	Satellite Photogrammetry and its Application	June 29 2020 – July 03 2020	68	33	Dr.P.K.Panda
2	Application of Geoinformatics in Ecological Studies	July 13 2020 – July 24 2020	14	10	Dr.P.K.Panda
3	Geospatial Inputs for Enabling Master Plan Formulation	July 27 2020 – July 31 2020	12	7	Dr.P.K.Panda
4	Remote Sensing Applications in Agricultural Water Management	August 03 2020 – August 07 2020	46	33	Dr.P.K.Panda
5	Remote Sensing and Digital Image Analysis	August 17 2020 – September 11 2020	12	8	Dr.P.K.Panda
6	Basics of Remote Sensing Geographical Information System and Global	August 17 2020 – November	12	8	Dr.P.K.Panda

Sl. No	Course name	Duration	No of Participants Registered	No of participants succeed	Coordinator
7	_Global Navigation Satellite System _	September 14– 25 2020	7	5	Dr.P.K.Panda
8	Understanding of Coastal ocean processes using Remote Sensing and Numerical Modelling	September 21 –25 2020	6	4	Dr.P.K.Panda
9	Geographical Information System	September 28 2020 – October 23 2020	23	16	Dr.P.K.Panda
10	RS & GIS Applications	October 26 2020 – November 20 2020	28	16	Dr.P.K.Panda
11	Remote Sensing of Land Degradation	December 01– December 07	12	7	Dr.P.K.Panda

Sl.No	Course name	Duration	No of Participants Registered	No of participants succeed	Coordinator
12	_Overview of Geoprocessing using Python	January 18-29, 2021	18	13	Dr.P.K.Panda
13	Satellite based Navigation: A Journey from GPS to Mobile phone platform	March 01-12, 2021	16	11	Dr.P.K.Panda
14	Geoinformatics for Disaster Management	April 05-16, 2021	23	16	Dr.P.K.Panda
15	Geospatial Technology for Archeological studies	May 17-28, 2021	18	8	Dr.P.K.Panda
16	_Overview of Web GIS Technology	June 21-July 02, 2021	12	7	Dr.P.K.Panda

Sl.No	Course name	Duration	No of Participants Registered	No of participants succeed	Coordinator
17	_Overview of Web GIS Technology	June 21-July 02, 2021	18	12	Dr.P.K.Panda
18	Machine Learning to Deep Learning: A Journey for remote sensing data classification	July 05-09, 2021	16	11	Dr.P.K.Panda
19	Geospatial technology for hydrological modelling	July 19-30, 2021	23	16	Dr.P.K.Panda
20	Geospatial Modelling for Watershed Management	August 02-06, 2021	18	7	Dr.P.K.Panda
21	_Basics of "Remote Sensing, Geographical Information System and Global Navigation Satellite System	August 16 – November 26, 2021	upcoming	Upcoming	Dr.P.K.Panda

Sl.No	Event Involvement	Event Description	Event Date	Event Organizer	Resource Person
1	Speaker	Artificial Intelligence and Smart Agriculture in FDP	30th Oct 20202	GMR Institute of Technology, Srikakulam	Dr. Sujata Chakravarty
2	Speaker	Artificial Intelligence and it's Application, Financial Engineering, Biomedical data classification and Smart Agriculture	12th June 2021	CUTM	Dr. Sujata Chakravarty
3	Speaker	Artificial Intelligence in Banking and Financial Sector (Global and Indian Perspectives)	23rd Jan 2021	Banking Finance and Insurance Institute of Nepal Limited, Nepal	Dr. Sujata Chakravarty
4	Event Judge/ Panelist	Idea Contest Program "To Mitigate Post-COVID Impact in Low and Middle-Income Countries"	16th Sep 2020	IEEE Bangladesh Section and IEEE YP Bangladesh	Dr. Sujata Chakravarty

Sl.No	Event Involvement	Event Description	Event Date	Event Organizer	Resource Person
5	Session Chair	International Conference on Intelligent Computing and Advances in Communication ICAC-2019	26thth Nov 2020	ICAC	Dr. Sujata Chakravarty
6	Session Chair	Springer International Conference on Machine Learning and Information Processing (ICMLIP)	29th Nov 2020	Springer	Dr. Sujata Chakravarty
7	Session Chair	Odisha International Conference on Electrical Power Engineering, Communication and Computing Technology (ODICON-2021)	9th Jan 2021	ODICON	Dr. Sujata Chakravarty
8	Session Chair	Conference of Electrical and Computer Engineering (IEEE WIECON-ECE 2020) – 2 Sessions	26th Jan 2021	WIECON	Dr. Sujata Chakravarty

Sl.No	Event Type	Event Description	Event Date	Event Organizer	Resource Person
9	Organizer	Organized Conference of Electrical and Computer Engineering (IEEE WIECON-ECE 2020)	26th and 27th Dec 2020	IEEE WIECON-ECE	Dr. Sujata Chakravarty
10	Organizer	Organized a Springer Conference from on Intelligent Computing and Advances in Communication, ICAC 2020	23rd – 25th Nov 2020	Springer, at SOA University, Bhubaneswar.	Dr. Sujata Chakravarty


8th IEEE WIECON-ECE 2022
8th IEEE International WIE Conference on Electrical and Computer Engineering 2022
30-31 December, 2022
Hosting Institute: International Institute of Information Technology, Naya Raipur (IIIT-NR), India
https://wiecon-ece.org/
Organized by
IEEE Madhya Pradesh Section and IEEE Bangladesh Section
And their WIE Affinity Groups
WiECON-ECE 2022
Appreciation Award
Presented to
Dr. Sujata Chakravarty
For presenting as the Tutorial Speaker at
8th IEEE WIECON-ECE
Dr. S. P. Mukherjee International Institute of Information Technology
Naya Raipur, India
Dec 30-31, 2022
Jointly Organized by
IEEE Bangladesh Section
IEEE
Venue


IEEE WIECON-ECE 2022
8thIEEE International Women in Engineering Conference on ELECTRICAL AND COMPUTER ENGINEERING
Meet our Keynote and Invited Speakers of IEEE WIECON-ECE 2022
Dr. Thomas M. Coughlin
2023 IEEE President-Elect
Dr. Bozenna Pasik-Duncan
University of Kansas, Lawrence, Kansas
Dr. Maheshi Dissanayake
University of Peradeniya, Sri Lanka
Prof. Dr. Mathini Sellathurai
Heriot-Watt University, UK
Azfar Adib
Concordia University, Canada
Dr. Nagham Saeed
University of West London, UK
Dr. Sujata Chakravarty
Centurion University of Technology & Management, India
Dr. P.A. Harsha Vardhini
Vignan Institute of Technology and Science Deshmukhi, India
Dr. Vijaylaxmi Biradar
Kalinga University, Raipur, India
Prof. Dr. Mohammed Imamul Hassan
Bangladesh University of Engineering and Technology (BUET)
IEEE Bangladesh Section
IEEE

Felicitated by Shri Priti Ranjan Ghadei, Hon'ble Minister of Rural Development and Skill Development and Shri Rohit Pujari, Hon'ble Higher Education Minister for Research Contribution at Utkal Mandap Bhubaneswar on the eve of Tech Fest Allegretto 2023 on 28th February 2023.

5.6 Delivered Talks by Faculties

Dr. Sujata Chakravarty, Delivered a talk on "Applications of Machine Learning in Precision Farming and Agriculture 4.0", IIIT Raipur, received Memento from Director Dr. Pradeep Kumar Sinha

Delivered a talk on “Efficient Management of Water and Fertilizer in Precision Agriculture” in a Workshop organised by IIT Bhubaneswar, SERB, DST, and Ministry of Education, Govt. of India on 8th April 2023.

Dr. Sujata Chakravarty delivered a talk on "Compliance and Challenges of COVID-19 on Research and Innovation" in International WOmen in Engineering COVID 19 Congress 2021.

Prof. Prafulla Kumar Panda
Invited as Speaker to Geoscience Conference at London

5.7 PhD student Guided by faculties

Dr Sujata Chakravarty:

1. **Name of the Student**: Puspanjali Mohapatra

Thesis Title: Medical Data Classification using Machine Intelligence and Evolutionary Computing Techniques

Year: 2017

2 **Name of the Student**: Maruti Nagendra Prakash

Thesis Title: Lung Nodule Detection using Hybrid Patch intensity-based Fruit Fly Optimization Segmentation and Classification

Year: 2021

3 **Name of the Student**: Bijay Kumar Paikray

Thesis Title: Medical Image Security with ROI Preservation

Year: 2022

4 **Name of the Student**: Santoshachandra Rao Karanam

Thesis Title: An Extensive Study of the Diagnosis and Classification of Fractures using Machine Learning, Deep Learning and Statistical Techniques

Year: 2023

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UNIVERSITY

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Empowering Communities...

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