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## **PROFILE & VALUE**

Distinguished background in Academic, Research and Industry sectors combined with a demonstrated passion for the knowledge of the educational system I am associated towards achieving the organization objectives though skill, knowledge , service, determination and to nourish within myself the dynamism required in this competitive & global academic system.

#### PROFESSIONAL EXPERIENCE - 23 Years (Teaching, Research and Admin-17yrs and Industry – 6yrs)

#1Employer : Utkal University, Bhubaneswar, INDIA

**Duration**: Since Jan 2021 to till date.

**Designation**: Coordinator (Academic), Utkal University and Adjunct Professor.

**Description**:

- Lecture to M.Tech, MCA, IMCA, M.Sc classes, academic assignments, Exam evaluation and Supervision of M.Tech (CSE and IT) thesis.
- Research findings in Mobile Computing, Wireless Ad-hoc and Sensor Network, Embedded System, IOT with publications in journals, conferences and patents.
- Information and Communication Technology (ICT) Management to enhance the information and global pedagogy system at University that can lead to improve the student learning and teaching methods. Also undertakes the ICT based support for the smooth functioning of elearning and e-office system for the University and departments.
- Technical and administrative support to the Computer Center, International office, WB-OHEPEE, RUSA Cell and Centers of excellences of Utkal University in order to strengthen the academic system.
- Assisting in various Quality assurance and research disciplines of Utkal University through IQAC and R&D.
- International Student Advisor for recognizing global visibility and leading to new collaborative findings with following responsibilities.
  - Coordinating teaching and academic exchange programs between Departments and interdisciplinary Centers of Excellences (CoEs). Academic exchange agreements and MoUs with international universities and Oranizations. Programs on Internationalization of higher education and international profile-building.
  - Academic assistance to international students for processing of applications, accommodation and other home stay related matters.
  - Organizing distinguished lecture Series for different departments by eminent visiting professors from foreign universities.
  - International Student and Scholar Services with visibility of international community and promote educational and cultural exchange program.
  - Manages International Travel grant for faculty and scholars. Mobility of funds and travel grant.
  - Documentations and vetting process for the MoU with International universities and associations.
  - Immigration information to international students. Monitors and tracks VISA and immigration status and maintaining of E-FRRO.
  - Organizing National and International conferences and workshops. Coordinating Short term courses / Foundation Courses through International office.
  - Technical support to webinars, virtual meetings and video conferences for the University and International office with almost sincerity.
- Ensuring timely, efficient and progressive performance of academic and administrative units of the University.
- Coordinating various components of teaching and learning improvement programmes, institutional restructuring, capacity building and reforms of educational agreements in order to strengthen the skill of existing scheme of academic system through WB-OHEPEE.
- Organization of intra- and inter-institutional workshops and seminars on quality- related themes and promotion of the University.

#2Employer : Utkal University, Bhubaneswar, INDIA

**Duration**: Since OCT- 2015 to DEC- 2020.

**Designation**: Doctoral Fellow (UGC), Dept. of Comp. Science and Asst. Coordinator, Utkal University.

**Description**:

• Lecture to M.Tech, MCA, IMCA, and M.Sc classes in semester pattern, academic assignments, Exam evaluation and Supervision of M.Tech (CSE and IT) thesis.

- Research findings in Wireless Ad-hoc and Sensor Network with publications in Journals, Conferences and Patents.
- Participated various GIAN Programs conducted by IITs and NITs.
- Responsible for implementation, administration & troubleshooting of Network and Security Infrastructure including Routers, Switches (Cisco), Firewalls (Checkpoint & Cisco PIX).
- Knowledge of configure and maintain network services, including backup and recovery and maintaining web servers in windows/Linux environment and troubleshooting of backend server systems and platforms specialized knowledge on server operating systems, virtualization platforms and cloud platforms & services.
- Experimented various simulator tools like NS2, NS3, MatLab in LINUX platform and Skilled based experiences for smooth functioning of the department.
- Knowledge of network and security infrastructure including Routers, Switches, Firewalls and backups.
- Ability to troubleshoot network and internet issues including backbone infrastructure issues.
- Assisting of hardware, software and network vendor's evaluation and implementation.
- Scheduled maintenance of Software/ Hardware with service packs and technology tools.
- Provide after-hours support for Infrastructure related emergencies as well weekend and holiday assistance.
- Technical Supports and services to the Computer Center, Central office, International office, and Centers of excellences of Utkal University.
- Technical support to webinars, virtual meetings and video conferences for the University.
- Deputed in various Quality assurance disciplines of Utkal University through IQAC.
- Active member in International office as Asst coordinator for managing various components for global connectivity like academic exchange agreements and MoUs with international universities and NGOs. Programs on Internationalization of higher education and international profile-building, recognizing global visibility and leading to new collaborative research.

#3Employer : University of California, USA

Duration : Nov 2018 to Jan 2019.

Designation : Visiting Doctoral Fellow
Description : To discuss with the poter

To discuss with the potential Overseas Experts on the research proposal that I expect for improving my research ability. I also benefice this occasion to investigate a possibility of research and get acquaintance with the academic environment at the University of California. Purpose was the academic and research contribution with University of California. During this period I visited and surveyed the followings.

#### • Networks Systems and Security Lab:

Deals with network topology problems, network monitoring and management, BGP policies routing, and peer-to-peer networking. On multimedia networks, they are concerned with QoS routing, video encoding and compression, resource allocation, traffic characterization and shaping, and multimedia scheduling. We are also working on designing a new class of operating systems, especially suitable for multimedia applications. Our lab cooperates with many companies and other research labs around the world, such as Intel-Research, Telcordia, Cisco, BBN, Microsoft-Research, CMU, LANL, etc.

I surveyed following Work Assignment projects in Networks Systems and Security Lab.

- Efficient Power Line Communications.
- Autonomous System (AS) Communication.
- Towards a User Centric Battery Management System for Smartphones.

## • High-Performance Computing Center (HPCC):

Here I went through the HPC hardware and software setup.

• Multipurpose cluster optimized for parallel, non-parallel and big data computing.

- Petabyte storage system for high-availability data directly attached to computing infrastructure.
- Parallel data storage system with 2PB GPFS storage (scales to >50PB) and Computer cluster with Over 6,500 CPU cores (50% Intel, 50% AMD),512-1024GB RAM per node ,GPU: 67,000 cuda cores ,IB network @ 56Gbs ,Queueing system Slurm Backup system with2PB GPFS storage ,Geographically separated server
- System Software with following packages are provided as part of the CentOS 7 operating system. They can be used without loading any modules.
- The software facility is strongly committed to maintaining a comprehensive software infrastructure for research applications in applied and basic parallel system. Currently, it maintains over huge open source bioinformatics software packages for NGS analysis, comparative genomics, data mining, statistics, molecular modeling, evolutionary biology, and all common programming environments.

## • Center for Geospatial Science:

The Center is building long standing research interests in and contributions to the development of novel spatial and spatio-temporal methods by team members. These methods offer the potential to increase our understanding of spatial dynamics and feedbacks inherent in many socioeconomic, environmental, biological, and physical processes. A particular emphasis in this work has been to address questions of scalability and high performance computing so that these new analytics can be applied in the era of big data represented by new types of streaming, network, sensor, mobile, and other non-traditional sources. This research requires scholars with expertise in advanced statistical theory, econometrics, computer science, geocomputation, engineering, and visualization, and bringing together new faculty in these areas will be a top priority to ensure the establishment of an excellent scientific core for the Center, and to advance spatial analysis. Here I went through various projects in the research of Spatial Statistics, Spatial Optimization ,Big Spatial Data ,Spatial Uncertainty, Open Source & Science.

#### • Technical Review Session and Presentation:

I joined and participated in the technical review session conducted by the research review committee of the Computer Science department.

• I also presented a technical session in my research findings "Scalability in Coastal Communication using Hybridization of MANET. An effective preparedness for Cyclonic Disaster" at the Networks Systems and Security Lab in the presence of Ph.D. students and Post Doc Fellows and we had a good conversation.

## • Data Science Center and Center for Cyber Security:

The Data Science Center supports interdisciplinary collaboration at university between research groups that generate data and research groups that analyze data. Research groups in the biology, economics, engineering, physics, and political science departments run experiments that generate gigabytes, terabytes, or Exabyte of data. Analyzing these large scale datasets requires specialized knowledge, and researchers in the computer science and statistics departments work together with researchers in these applied fields to analyze their data. They use large scale machine learning, data mining, and database techniques.

## Summary:

Two mission-driven features of the campus – a faculty recognized worldwide for its high-impact research and the transformative impact the University has on the social mobility of the students it serves – come together here in ways that make UCR like no other institution in American higher education. UCR is one of the most diverse research universities in the nation, and is one of only a handful of universities in the U.S. with both a "very high" research Carnegie classification and Hispanic Serving Institution status. Overall, the vision and goals include creating a portal for championing, catalyzing, and fostering new UCR research partnerships, and accelerating the pace of innovation and impact through basic research and knowledge transfer. Also I visited San Jose State University, Stanford University, Intel Corporation , Apple Inc, Face book Inc, Google Inc, Microsoft Inc , USA.

#4Employer : College of Engineering Bhubaneswar, INDIA

**Duration** : JUL 2010 to SEP 2015.

**Designation**: Assoc. Prof in Comp. Sc.&Engg/MCA

**Description**:

• Lecture to subjects of M.Tech, MCA and B.Tech under BPUT, INDIA and also implement various teaching methods and procedures to maintain the standard of academic excellence. Also coordinating research activities for both Faculty and M.Tech Scholars.

- Specialization in Wireless Network, Mobile Computing, Operating System, Computer Architecture and Software Engineering.
- Organizing and Conducting various Conferences, Workshops and Seminars funded by AICTE ,MHRD and ISTE as Convener for both Department and College with almost sincerity .Also conducted number of workshops from different subjects as coordinator sponsored by NMEICT, IIT- Bombay and IIT- Kharagpur.
- Research guidance to both the undergraduate and post-graduate students for preparing and publishing research papers in different conferences and journals.
- Supervision of Project and thesis for the B.Tech, MCA and M.Tech students.
- Participated for designing and preparation of the Syllabuses & Curriculum development for the local universities and Councils of Odisha.
- Deputed as External Examiner to number of universities and colleges for conducting of Lab and VIVA examination.
- Deputed as External Supervisor to number of colleges for smooth conduction of university examination.
- Coordinated various Pre-Placement Training programs in association with Placement Companies like Infosys, Wipro, TCS, HCL, etc.
- Deputed in various administrative disciplines in Quality Assurance (Affiliation and Accreditation of AICTE, NBA and NAAC), Research & Development, Capacity Building and Industry Institute Exchange programs.
- Preparation and submission of the Annual Quality Assurance Report (AQAR) as per the guidelines of the university and parameters of NAAC.

#5Employer : KISD, Bhubaneswar, INDIA
Duration : JULY- 2009 to JULY- 2010.
Designation : Asst. Prof in Comp. Sc and Engg.
Description :

- Lecture to subjects of B.Tech & MCA, under BPUT.
- Conducted course lectures labs and other instructional activities at the scheduled times.
- Effectively plan lectures labs in accordance with the university course outlines and Conduct course lectures labs and other instructional activities at the scheduled times.
- Conduct make-up sessions within the scheduled academic term with approval of the academic Head and enforce the university rules as published in the student handbook.
- Submit grades and records accurately and promptly in accordance with the university grading policy procedure.
- Report any university related problems to the academic head or university authority.
- Serve in academic committees as assigned and actively participate in campus university activities
- Adapt to course assignments scheduling needs and Participate when needed in local university curriculum development activities.
- Deputed as External Supervisor to number of colleges for smooth conduction of university examination.
- Organized workshops, Seminars and arrange guest lecturer for providing additional knowledge for students. Maintain records for student's progress

#6Employer : NIIS Group of Institutions, Bhubaneswar, INDIA

**Duration** : AUG -2006 to JUL 2009.

**Designation**: Sr. Lecturer in Computer Science

**Description**:

- Lecture to no of subject of MCA, MBA, BCA and BBA under BPUT&UTKAL UNIVERSITY.
- Taught Computer Science papers, Computer Network, Operating System, Computer Architecture, Data structure, graphics, computer programming, management of computers and Information Technology including LAB.
- Develop assessment tasks using a wide range of formative and programming tool.

- Provide timely feedback to students and utilize a data driven approach to teaching and learning
- Work cooperatively with subject area teachers, planning lessons, sharing resources, and cross grading.
- Placement training conducted through various companies.
- Maintain up-to-date records of assessments, attendance, planning, syllabus and reports
- Coordinating curriculum planning meetings, faculty meetings, student activity meetings and Reports directly to its academic administrator.
- Participate in student induction week activities and student placement training.
- My responsibility was also to co-ordinate the seminars & workshops for both the college & department with almost sincerity.

#7Employer **NOVELL Inc. Onwards INDIA** 

**Duration** : Designation : Description

DEC-2004 to JUL-2006 **Technical Support Engineer** 

- Produce enterprise-level designs for Active Directory and Windows File Services for global initiatives following those through to implementation via collaboration with project and support teams.
- Perform daily system monitoring, verifying the integrity and availability of all hardware, server resources, systems and key processes, reviewing system and application logs, and verifying completion of scheduled jobs.
- Create and maintain system documentation for Migration, domain technologies, including installation, configuration, and appropriate troubleshooting steps
- Experience with network server, Workstation and troubleshooting of network connectivity
- Experience with database related technology and administration (SQL Server, Oracle, DB2, etc)
- Experience with Servers (Dell, HP, IBM, etc) and Server Management Software's as Novell NetWare/Mac OS/ Windows/UNIX/LINUX.
- Good knowledge on Windows NT 4.0, Windows 2000, Windows 2003 & Windows 2008 including Active Directory with scripting and programming language.
- Experience with firewalls and security related issues for reliable services.
- Understanding of modern IT production data center, hosting operations and End Users ecosystem
- Programming experience is a plus (ASP, DHTML, C#, Visual Basic, etc.)
- Novell Tools Management with UNIX, Windows Administration. Netware 5.5 Installation & Configuration, Netware 5.5 Server Management, Novell e-directory Management, Users and Network Security, Netware Printing Services, File Storage & Management, Netware File Access, Multiprocessor and Clustering Support, Experience in Novell Identity Management, e-Directory, i-Manager, Identity Management, Installing and developing drivers in Novell. Net IQ 4.0.2 installation and configuration, NAM 3.2 installation and configuration.
- Participate in technical communications within the Technical Support Team to share best practices and learn about new technologies

#8Employer CG Institute of Hardware Training (CGIHT) and TQM Consultancy (SI Division), Bhubaneswar

**Duration** FEB-2000 to MAR-2004. Designation System Engineer and Trainer

Description

- Planning of IT initiatives including installations, configuring and performing equipment setup, upgrades, configuration adds moves changes.
- Maintain servers and workstations installation, configuration troubleshooting and Perform scheduled maintenance with service packs.
- Exchange Server administration and operation systems securities and resolving user-reported hardware, software problems.
- Conducting of training classes which includes the base of the Networking to a core Network platform like UNIX, Novell Netware & Windows NT with all support of practical session.
- I was conducting commercial projects, corporate trainings & Summer Training for the Engineering colleges. I was also involved as a System Co-ordinator in TQM Consultancy (SI Division) running by the same organization during that period for initial system evaluation and estimation of new project with system level security.

## **RESEARCH PUBLICATIONS:**

# **PATENTs:** IP India:

## Design:

- 1. "Vertebral Augmentation Needle Module", Appl No.- 348759-001
- 2. "AI Based Apparatus for Identification of Skin Disease". Appl No.- 383347-001

#### **Innovation:**

- 3. "Kinetics, Isotherm And Thermodynamic Parameter Evaluation Of Adsorption Of Methylene Blue On Groundnut Shells", Appl. No- 202331056335
- "Experimental Study on Flexural Strength of Geopolymer Graded Fiber Concrete", Appl No-202331055008.
- 5. "Flat-Slab Construction Using Coconut Shell Concrete", Appl. No- 202331038688
- "Steel slag Reinforced Concrete Preparation Process Thereof", Appl. No- 202331031936
- 7. "AI Based Smart Meter For Municipal Waste Water Treatment". Appl. No.- 202331025391
- "Iot Dataset Authentication Spending Machine Learning Practices For Traffic Anomaly Recognition", Appl. No- 202241051842
- 9. "Methodology based on Machine learning clustering for resource sharing in ad-hoc network", Appl. No-202231037894
- "IoT and AI based smart green house farming with efficient irrigation systems to detect and prevent for all plant disease using WSN and Deep learning Algorithm." Appl. No-202231029573
- 11. "An IoT based child health monitoring system for rural area and method thereof.", Appl No- 202131052675
- "A Control System Based On AI & MI For An Inhaling Device And Method Thereof", Appl No-202231001901
- 13. "Intelligent Agriculture Smart Iot System To Assist Farmers In Effective Decision Making Using Data Science", Appl no- 202141046585.
- 14. "Prediction And Image Generation Model Using Machine Learning To Train Self-Driving Cars." Appl. No-202141037739.
- 15. "A Novel Block Based Feature Level Image Fusion System Using Lwt And Neural Networks" Appl No-202141037164.
- 16. "A System and Methods of Image-based assay using AI and Machine Learning" Appl No-202141035988
- 17. "Intelligent Indoor Navigation and Positioning System using Augmented Reality" Appl No-202141035168
- 18. "Skin Cancer (Melanoma) Detection and Recommender System using Deep Learning", Appl No-202141034599.
- "System And Method For Performing Secure Transactions of Digital Crypto currencies Using Blockchain Technology", Appl. No-202141032739
- 20. "System And Design Of Sensor Based Electronic Ventilator for Covid-19 Patients", Appl. No-202141022329
- 21. "Sensor Based Intelligent Robotic Device For Elder People to Detect Their Falling And Mechanism To Ensure Their safety", Appl No- 202121006119
- 22. "Sensor Based Intelligent Device To Monitor Physical And Mental Health Of Patients Based On Their Breathing Patterns, Odour And Respiratory Measurements", Appl No- 202131007234
- 23. "Recommender System To Monitor Mental Health Of A Person Using Artificial Emotional Intelligence", Appl. No- 202141025391
- 24. "Ensuring Nutritional Value Of Food Products From manufacturers To Consumers Using Wireless Sensor networks And Blockchain Technology", Appl No- 202141021547
- 25. "Artificial Intelligence Based System For Face Detection And Identification Of Masked Faces During Covid Pandemics", Appl. No- 202141015648
- 26. "Artificial Intelligence Based Smart Toilet For Elders And Physically Challenged People", Appl No-202121004527.

## IP\_UK:

27. AI Based Smart Goggles For Construction Labours, Appl. No- 6282284.

## **IP\_ Australia:**

- 28. "Method of Coastal Communication and Response System during Tropical Cyclone using Mobile Ad-hoc Network", Appl. No- 2021104117
- 29. "Autonomous QoS Based catastrophic Disaster communication System In Mobile Ad Hoc Network Using Ant Colony Optimization" Appl. No- 2021107039.
- 30. "An Extreme Learning Machine (Elm) Based Crop Yield Prediction System And Method Using Borda Count Technique" Appl. No- 2021107043.
- 31. "A Novel Robust Artificial Intelligence Based Software Modeling Tool With Long Short-Term Memory To Detect Web Attacks" Appl. No- 2021106440.
- 32. "Mobile User Trajectory Prediction System With Extreme Machine Learning Algorithm", Appl. No-2021105525.
- 33. "System & Method For Automatic Health Prediction Using Fuzzy Based Machine Learning", Appl. No-2021102832.
- 34. "System For Issue Alert Of Security Breach Using Machine Learning And Fuzzy Logic." Appl. No-2021100314.

## **JOURNALs:**

- Sarangi, Sanjaya Kumar, et.al (2024), "Hybrid Heuristic Driving Training-Rider Optimization Algorithm for QoS-aware Multicast Communication System in MANET", Australian Journal of Electrical and Electronics Engineering, Taylor & Francis, DOI: 10.1080/1448837X.2024.2309428.
- Sarangi, Sanjaya Kumar, et.al (2023), "Examination of the Bi-LSTM Based 5G-OFDM Wireless Network Over Rayleigh Fading Channel Conditions." Journal of Mobile Multimedia, 19(04), 1067–1106. https://doi.org/10.13052/jmm1550-4646.1948.
- 3. Sarangi, Sanjaya Kumar, et al. "Disease Prediction Using Novel Deep Learning Mechanisms". Journal of Pharmaceutical Negative Results. (Dec. 2022), 4267–4275. DOI:https://doi.org/10.47750/pnr.2022.13.S09.530.
- 4. Sarangi, Sanjaya Kumar, et al. "Malware Threat Affecting Financial Organization Analysis Using Machine Learning Approach." IJITWE vol.17, no.1 2022: pp.1-20. <a href="http://doi.org/10.4018/IJITWE.304051">http://doi.org/10.4018/IJITWE.304051</a>, IGI Global.
- Sarangi, Sanjaya Kumar, et al. "Fitness sorted Red Deer-Cat Swarm Optimization-based Autonomous QoS-aware Multicast Communication System in MANET", Parallel Processing Letter, ISSN (print): 0129-6264 | ISSN (online): 1793-642X, World Scientific.
- Sarangi, Sanjaya Kumar, et al. "Implementation of Novel Machine Learning Techniques for Efficient Spectrum Management in Cognitive Radio Networks", Provincia Journal, Telematique, Volume 21, No.1, July-2022, P.210-223, ISSN:1856-4194.
- 7. Sarangi, Sanjaya Kumar, et al. "Automated Crop Yield Prediction System Using Machine Learning Algorithm" Journal Of Algebraic Statistics, Volume 13, No. 3, 2022, p.2512-2522, ISSN:1309-3452, June-2022
- Sarangi, Sanjaya Kumar, et al. "Optimization of Hello Message Broadcasting Prediction Model for Stability Analysis", Hindawi, Wireless Communications and Mobile Computing, vol. 2022, Article ID 2785810, 9 pages, 2022
- 9. Sarangi, Sanjaya Kumar, et al. "Development Of Autonomous QoS Based Multicast Communication System In MANET", International Journal of Computer Networks and Applications (IJCNA) . ISSN: 2395-0455, volume 8 issue 5, August 2021.
- Sarangi, Sanjaya Kumar, et al. "A Novel Active Information Replication mechanism for Cloud and Big Data."
   Design Engineering, ISSN: 0011-9342 | Year 2021 Issue: 8 | Pages: 5395 5407
- 11. Sarangi, Sanjaya Kumar, et al. "An Empirical Study On Clustering Schemes For Mobile Ad-Hoc Networks", International Journal of Researchand Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume 6 | Issue 2 | May 2019.
- Sarangi, Sanjaya Kumar, et al. "A Review On Iot Based Farmer Domain System Towards E-Agriculture Of INDIA" IOSR Journal of Engineering (IOSRJEN), ISSN (e): 2250-3021, ISSN (p): 2278-8719, Volume-I, PP 04-10, 2018
- Sarangi, Sanjaya Kumar, et al. "An Outlier Detection and Rectification Method in Cluster Based Wireless Sensor Network", International Journal of Computer Science and Telecommunications (IJCST), ISSN-2047-3338, [Volume 3, Issue 4, April 2012].

# **CONFERENCES**

- Sarangi Sanjaya Kumar, et al. "Improvement of Exemplar Based Inpainting By Enhancement of Patch Prior process" IEEE International Conference on Applied Electromagnetics, Signal Processing & Communication (AESPC-2023), 24th -26th Nov, 2023
- Sarangi Sanjaya Kumar, et al. "Power Conscious Clustering Algorithm Using Fuzzy Logic in Wireless Sensor Networks" Springer International Conference On Innovations in Intelligent Computing and Communications, ICIICC-2022, 16th-17th Dec, 2022.
- Sarangi, Sanjaya Kumar, et al. "Ant Colony Optimization Based QoS Routing in Mobile Ad Hoc Network: A Mobility Model in Urban Environments", IEEE International Conference on Applied Electromagnetics, Signal Processing & Communication, AESPC-2021, 26<sup>th</sup> -28<sup>th</sup> Nov, 2021
- 4. sarangi, sanjaya kumar, et al. "Geographical mapping system (gms): an improved gis in disaster Management" National Conference of the Ocean Society of India, OSICON 2021, 12-14 August, 2021
- Sarangi, Sanjaya Kumar, et al. "Node Mobility and link Stability: A Geographical Mapping System rather than GIS in Disaster Management." International Conference On Science, Society and Politics in South Asia, ICSSP-2020, 3-4 March, 2020.
- Sarangi, Sanjaya Kumar, et al. "Deleterious Impact of El Niño on Climatic Pattern of India and Indonesian Archipelag" International Conference On Science, Society and Politics in South Asia, ICSSP-2020, 3-4 March, 2020.
- Sarangi, Sanjaya Kumar, et al. "Analytical Study of Scalability in Coastal Communication Using Hybridization of Mobile Ad-hoc Network: An Assessment to Coastal Bed of Odisha". International Conference on Innovations in Bio-Inspired Computing and Applications, December 16-18, 2019, Springer.
- 8. Sarangi, Sanjaya Kumar, Research Scholar Conclave at Utkal University on 30<sup>th</sup> April 2016 and presented a paper on "Clustering and service approach in Mobile Ad-hoc Network-A Review"
- 9. ISTE Odisha Faculty Convention on at CEB, Bhubaneswar on 26<sup>th</sup> and 27<sup>th</sup> DEC 2015 and presented a paper on "Thinking About The Potential Impacts Of BIG DATA For Development Of Countries."
- 10. International Conference on Innovative Computing and Information Processing at Mallasamudram ,Tamilnadu from 29<sup>th</sup> to 31 MAR,2012 and presented a paper on "Clustering approach towards wormhole attack in IDS based MANET"
- 11. National Conference on "Emerging Trends and Technology" at SIMS Indore from 18th to 20th NOV 2010 and Presented a paper on "Hidden threats to security system in MANET"

## **BOOK EDITORs:**

- 1. **Robotic Process Automation,** ISBN: 978-1-394-16693-0, Wiley, USA <a href="https://www.wiley.com/en-in/Robotic+Process+Automation-p-9781394166930">https://www.wiley.com/en-in/Robotic+Process+Automation-p-9781394166930</a>
- 2. **Quantum Computing in Cyber Security**, ISBN: 978-1-394-16738-8, Wiley, USA <a href="https://www.wiley.com/en-in/Quantum+Computing+in+Cybersecurity-p-9781394167388">https://www.wiley.com/en-in/Quantum+Computing+in+Cybersecurity-p-9781394167388</a>
- Conversational Artificial Intelligence, ISBN: 978-1-394-20056-6, Wiley, USA <a href="https://www.wiley.com/en-in/Conversational+Artificial+Intelligence-p-9781394200566">https://www.wiley.com/en-in/Conversational+Artificial+Intelligence-p-9781394200566</a>

## **BOOK CHAPTERs:**

- Sarangi, Sanjaya Kumar, et al. "Dark Web Pattern Recognition and Crime Analysis Using Machine Intelligence", "Implementation of Machine Learning techniques for Analyzing Crime & Dark Web Data", , ISBN: 978-1-6684-3942-5, IGI Global, USA.
- Sarangi, Sanjaya Kumar, et al. "Multi-Node Data Privacy Audit for Block chain Integrity", "The Data-Driven Blockchain Ecosystem: Fundamentals, Applications and Emerging Technologies" ISBN: 978-1-032-21624, CRC Press (Taylor & Francis Group).
- 3. Sarangi, Sanjaya Kumar, et al. "Conversational Artificial Intelligence", "Introduction to Chatbot's Security Risks, Their Probable Solutions, and the Best Practices to Follow", ISBN:9781394200801, Wiley, USA

## **TEXT BOOKs:**

- 1. Computer Network, Scientific International Publishing House, ISBN:978-93-92992-83-4
- 2. Microprocessor and Microcontroller, Scientific International Publishing House, ISBN:978-93-94002-13-5
- 3. Neural Network, South Asian Academic Publication, ISBN:978-93-92153-03-7
- 4. Mobile Computing, Scientific International Publishing House, ISBN:978-93-5625-296-7
- 5. **AI and Robotics**, Academic Guru Publication House, ISBN:978-93-95468-28-2
- Wireless Communication System, Academic Guru Publication House, ISBN:978-93-95468-91-6

## **DIGITAL RESOURCES:**

- 1. Contributed Digital Resource of Information's for Class –XI &XII syllabi of Computer Science Stream, Minorities &Backward Classes welfare Department, Govt. of Odisha.
  - <a href="https://www.youtube.com/watch?v=QpUeD1oI3Jk&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&index=1">https://www.youtube.com/watch?v=QpUeD1oI3Jk&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&index=1</a>
  - https://www.youtube.com/watch?v=60PG9b7Bips&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&in dex=2
  - https://www.youtube.com/watch?v=8oF-AZ2d82U&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&index=3
  - <a href="https://www.youtube.com/watch?v=c6Ws39m6ZSA&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&index=4">https://www.youtube.com/watch?v=c6Ws39m6ZSA&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&index=4</a>.
  - <a href="https://www.youtube.com/watch?v=aZoV-">https://www.youtube.com/watch?v=aZoV-</a>
    BPpWMM&list=PLym092t65AE9STtKAsU6uE5e81FUigUYs&index=5
  - <a href="https://www.youtube.com/watch?v=E7IU\_pAdKy4&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&i">https://www.youtube.com/watch?v=E7IU\_pAdKy4&list=PLym092t65AE9STtKAsU6uE5e81FUjqUYs&i</a> ndex=6
- 2. EMRS PGTs Capacity Building Training (Computer Science), Govt. of Odisha.
  - <a href="https://www.youtube.com/watch?v=I9IRDP\_A2pg&list=PLym092t65AE-7bR9aUE4YpdIM2dH29-pd&index=31">https://www.youtube.com/watch?v=I9IRDP\_A2pg&list=PLym092t65AE-7bR9aUE4YpdIM2dH29-pd&index=31</a>

## **FELLOWSHIP & GRANT**

- Junior Research Fellow (JRF): National Fellowship in Science & Technology, UGC, Govt. of India
- Senior Research Fellow (SRF): National Fellowship in Science & Technology, UGC, Govt. of India.

## **PROFESSIONAL AFFILIATIONS**

## **Subject Teaching:**

Under Graduate : Computer Network, Parallel Computing, Operating Systems, Computer

Architecture, Software Engineering, System Analysis And Design, Data Structure,

Mobile Computing, Data Compression and Encryption,

Post Graduate : High Speed Networks, Wireless Networks, Advance Software Engineering,

Advanced Computer Architecture, Embedded System, Mobile Computing, RTOS.

CSTA K-12 (Comp.Sc) : Working with the CSTA K-12 Computer Science Standards, released in 2017,

Delineate a core set of learning objectives designed to provide the foundation for a complete computer science curriculum and its implementation at the K-12 level. To this

end, the CSTA Standards:

- By introducing the fundamental concepts of computer science to all students, beginning at the elementary school level.
- Present computer science at the secondary school level in a way that can fulfill a computer science, math, or science graduation credit.
- Encourage schools to offer additional secondary-level computer science courses
  that will allow interested students to study facets of computer science in more depth
  and prepare them for entry into the workforce or college.
- Increase the availability of precise computer science for all students, especially those who are members of underrepresented groups.

## **International Affairs and Student Advisor:**

- Administration in various components of International office as Coordinator Academic and International student Advisor of Utkal University.
- Conducted various National/International seminar/ workshop/ Conferences on Internationalization of higher education and Inter cultural competences organized by International office and WB-OHEPEE.
- Conducted Various Distinguished lecture series inviting delegates from foreign universities.
- Conduction of Certificate Course in German language, French language, Russian Language organized by International office.
- Organized Round Table Orientation program on Fulbright Fellowship in collaboration with the United States International Educational Funding (USIEF).
- MoU with University of California, Berkley, USA
- MoU with North Eastern University, Boston, USA

- MoU with NW University, South Africa
- MoU with Mahendradatta University, Bali, Indonesia.
- MoU with Ural State Forest Engineering University, Russia.
- MoU with Education Testing Services(ETS), Princeton, New Jersey, USA
- Technical Support for the Web site Design and Maintenance.
- Managing Accounts for the event conducted and fund released to International office.
- Conduction of Webinar in various topics by International Office.
- International student Admission resolutions and Support for dual degrees programs.
- Academic exchange agreements and MoUs with international universities and NGOs. Programs on Internationalization of higher education and international profile-building.
- Academic assistance to international students for processing of applications, accommodation and other home stay related matters.
- Organizing distinguished lecture Series for different departments by eminent visiting professors from foreign universities.
- International Student and Scholar Services with visibility of international community and promote educational and cultural exchange program.
- Manages International Travel grant for faculty and scholars. Mobility of funds and travel grant.
- Immigration information to international students. Monitors and tracks VISA and immigration status and maintaining of E-FRRO.
- Organizing National and International conferences and workshops. Coordinating Short term courses / Foundation Courses through International office.
- Technical support to webinars, virtual meetings and video conferences for the University and International office with almost sincerity.
- Material Design for the Foreign Language Courses French and German.
- Looking after of Booklet, Leaflet and Brochures for International office.
- Coordinating of International student admission and Cultural activity through ICCR and Study India.
- Health and travel Insurance support to the International Student.
- Profile Management for Utkal University in the website of ICCR and Study in India.
- Assistance to teachers/students for international mobility.
- Management of international projects for teaching and mobility.
- Support to the staff to manage the procedures recommended by Erasmus programme.
- Management for incoming and outgoing student's mobility, research projects and traineeship abroad.
- Support for implementation and drafting of academic cooperation partnership.

#### **ICT & System Administrations:**

- Usage of web for doing assignments and activities not withstanding eBooks/e-journals.
- Usage of video-conferencing for live class lectures for the students who are not able to attend the class.
- Usage of ICT for attendance recording system.
- Availability of online multimedia/video-conferencing during lectures in the Smart Classroom.
- Implementations of advanced digital library and e-books and e-journals.
- Provide computational facilities to the faculty members and Research Scholars of the University.
- Understanding of the cross-institutional dimensions of enterprise systems, ICT infrastructure and the associated service delivery within a complex and highly devolved environment.
- Knowledge of Project Design and Management methodologies.
- Significant knowledge of major technological developments influencing enterprise networking and ICT infrastructure provision and management at University.
- To create more and more content in local languages for the preservation of cultural values.
- Management regarding examination, form fill-up or other upcoming events can be prompted to the incumbents via smartphone apps.
- To structure an integrated authority which monetises all the factors affecting the grassroots level execution of ICTs and working as an assistant body of the government in ICTs specialization.
- To increase the number of authorized portals for improving the quality of learning system.
- To promote quality and productive research for direct implementation in the classrooms and gradually applying ideas to reduce the cost.
- To run accessible and interactive training programs for students and educators.
- To modify the curriculum framework with respect to contemporary knowledge and make it adaptable to the ICT.
- Plans, recommends, and design of local or remote computer systems, overseas the day-to-day operation

- of the computer networks including LAN-to-LAN/WAN systems; evaluates systems performance and recommends solutions.
- Develops and implements network support and operational procedures; maintains existing LAN, internet, DNS, database and electronic mail servers..
- Consults with technology task force and contributes in the planning of infrastructure for voice, video and data networks; recommends and specifies the purchase of related products and services.
- Manages the video conferencing equipment, and may train the staff on the use of the network, conferencing, and security systems.
- IT management for both inside and outside the Office and provide needed assistance with Internet connectivity and access procedures, Technical problem solving techniques.
- Conducting seminar workshops Specific to knowledge and expertise to keep skills and knowledge current with industry trends.
- Plan and organize work to meet priorities and time lines, Work independently and demonstrate initiative, and adapt to willingness to learn, the operation and procedures of new network systems.

## Project/ Thesis Guidance (B.Tech, M.Tech, MCA, PhD):

• Master's : MCA- More than 30

M.Tech-More than 14

Under Graduates : B.Tech- More than 36

BCA- More than 12

Projects :

• PhD : 4 Continuing

## **Honors, Awards & Achievements:**

- Honorary Advisor and Patron for Kalinga International Youth Foundation(KYF), INDIA, 2023
- Distinguished Academic & Research Excellence of the Year, Iconic Achievers Awards 6<sup>th</sup> Oct 2023,
- Intrenatonal Award at Global Economic Forum by Republic of Indonesia, Bali, 29<sup>th</sup> Sep 2023
- Academic and International Excellence, Kalinga Pride Award at Bali, Indonesia, 30<sup>th</sup> Sep 2023
- Best International Collaborator Award in Science and Technology by Nature Science Foundation, India, 2022.
- Elevation to the grade of IEEE Senior Membership, 2022, USA
- Certified Mendeley Advisor Achievements, 2021.
- Best Senior Researcher Award-2021, Global Education And Corporate Leadership (GECL-2021)
- Global Teacher Award 2021, AKS Education Awards, INDIA
- INDIA Prime Top 100 Professors & Teachers award 2021, by India Prime Award
- Best Academic Coordinator Award 2021 by 3rd International Academic and Research Excellence Awards (IARE) 2021 - An initiative by GISR Foundation.
- Award for Contribution at International Stage by Global Teaching Excellence Awards 2021 organized by Kiteskraft Productions.
- Outstanding Leadership Award by Global Teaching Excellence Awards 2021 organised by Kiteskraft
- International Academy Excellency Award 2021 by International Institute of Organized Research, India
- Global Eminent Research Award GEA Awardees by VIJ Trust
- GATE Qualified.
- Best Faculty Award by ISTE, Odisha Section, INDIA
- Got the Faculty Talent Award by Infosys FDEP.
- Supporting Award for Employee of the Year 2004,— Onwards Novell ,INDIA Cited for "Outstanding Corporate Trainer on NDS Security"
- Got the 1st prize in District level Science Project Competition in the Class of 10th.
- Got NRTS in the class of 7<sup>th</sup> at Rengali Project High School, Angul, Odisha.

#### **IEEE Contributions**

- Senior Membership
- Contributed More than 10 Activities in Different Chapter.
- Conducted and Participated More than 30 Webinars and Conferences.
- Workout more than 10 programs in Region 10.
- Joined More than 20 Lecture Series conducted by Different region.

## **Invited Lecture/ Talk:**

# International (Physical and Virtual)

- University of Mahendradatta, Bali, Indonesia
- CSTA, Sacramento, Bay Area, California, USA.
- NWU University, Potchefstroom, South Africa
- Jimma Institute of Technology, Jimma University, Ethiopia
- School of Computing and Informatics, Mizan-Tepi University, Ethiopia
- University of California, USA
- Nipissing University, Ontario, Canada
- Jeddah International College, Jeddah, Saudi Arabia, UAE
- University of Udayana, Bali, Indonesia
- Comilla University, Bangladesh
- International Islamic University, Chittagong

## National (Physical & Virtual)

- Ganpat University, Gujurat
- KLE Institute of Technology, Hubli, Karnatak
- SG Balekundri Institute of Technology, Belagavi, karnatak
- NITTTR, Chandigarh.
- Manipur International University, Manipur
- IGNOU, Regional Center, Bhubaneswar.
- Tribal Research and Training Institute, Bhubaneswar.
- Integrated Coastal Zone Management Project, Odisha
- Institute of Entrepreneurship Development, Bhubaneswar.
- Orissa Engineering College, Bhubaneswar
- Krupajala Engineering College, Bhubaneswar
- Roland Institute of Technology, Berhampur
- NIIS Group of Institutions, Bhubaneswar
- College of Engineering Bhubaneswar
- Rajdhani College, Bhubaneswar
- Panchayat College, Baragarh

## **Professional Memberships**

- Senior Member at IEEE, USA
- Member of ACM, NY,USA
- Professional member of the California Association of Science Educators (CASE), USA
- Member of SIAM.PA.USA
- Member of ALT,UK
- Member of ASTM ,PA,USA
- Member of CSTA, NY, USA
- Member CSI, INDIA
- Life Member of ISTE, New Delhi.
- Member of IACSIT, SINGAPORE.
- Member of IAENG, HONG KONG.
- Senior Member of TheIRED, NY, USA.
- Senior Member of IEDRC ,HONG KONG.
- Life Member, Odisha Bigyan Academy, Bhubaneswar.
- Life Member International Institute of Organised Research, India
- Fellow Member, International Institute of Organised Research, India
- Mendeley Certified Advisor. (Elsevier)
- Member of Global Directory of Educators and Researchers.

- Member Plus to CSTA K-12 Computer Science Chapter, Sacramento, Bay Area California, USA.
- Member to Program Technical Committee at International Conference on Network Communication and Information Security (ICNCIS), China.
- Session Chair International Conference on 6G Communication and Internet of Things Technology (6GIoTT), China.
- Member and Session Co- Chair to Program Technical Committee at Springer International Conference On Innovations in Intelligent Computing and Communications(ICIICC), Utkal University, India
- Member to Program Technical Committee and Review Panel at Springer International Conference on Computing Science, Communication and Security (COMS2), Ganpat University, INDIA
- Member to Program Technical Committee and Review Panel of the1st International Conference on Advanced Innovations in Smart Cities (ICAISC), Jeddah, Saudi Arabia, on 23-25 January 2023.
- Chairperson to International Seminar on Empowerment of women in Revitalizing World: Past and Present, Utkal University on 23-25, FEB, 2023.
- Professional Ambassador of IFERP, INDIA
- Member to Program Technical Committee and Review Panel of the 12th International Conference on Information Technology Convergence and Services (ITCSE 2023), July 29 - 30, 2023, London, United Kingdom.
- Member to Internal Committee International Conference on Wireless Communication and Information Security (ICWCIS 2023), July 10, 2023, Guangzhou, China.
- Member in Eminence of Society of International Affairs, Virginia, USA
- Life Member to Epidemiology Foundation of India (EFI) and International Epidemiological Association (IEA)

## **Professional Activities**

- Appointed as Visiting Faculty for IGNOU, BJB College, Ravenshaw University, Utkal University, Bhubaneswar since 2009.
- Appointed as External Examiner in Comp. Sc & IT for BPUT, Utkal University, IGNOU, Sambalpur University, Ravenshaw University and Council of Higher Secondary Education, Odisha since 2009.
- Corporate Trainer to East Cost Railway, Institute of Physics, Vizag Steel, ICZMP, Govt. of Odisha since 2008.
- Workshop Coordinator of NMEICT, IIT Bombay and IIT Kharagpur.
- Completed Refresher Course in Computer Science from UGC Academic College, Utkal University, INDIA.

## **Editor and Reviewer**

- Editorial Board Member for the journals of Lattice Science Publication (LSP), India
- Editor in for the Journal of Cloud Computing and Data Science, Universal Wiser, Singapore.
- Editor-in Chief -Vasistha Prakashan under Vasistha Foundation & Educational Trust
- Editor-in-Chief <u>www.examodisha.com</u>, e-Learning and e-Resource system.
- Editor, Certificate Course in French Language, Utkal University.
- Editor, Certificate Course in Russian Language, Utkal University.
- Reviewer, International Conference on Mobile Networks and Wireless Communications (ICMNWC).
- Reviewer, International Conference on Advancement in Computation & Computer Technologies (ICACCT)
- Reviewer, International Conference on Computing Science, Communication and Security (COMS2).
- Reviewer, International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE).
- Reviewer, International Conference on Computer Science, Engineering and Applications (ICCSEA).
- Reviewer, International Conference on Data Science and Information System (ICDSIS).
- Reviewer, International Conference on Networks, Communication and Information Technology (NCIT)
- Reviewer, IEEE MysuruCon, Mysuru.
- Peer Reviewer for Journal of Cyber Security and Mobility, River Publishers.
- Peer Reviewer for International Journal of Business Data Communications and Networking (IJBDCN), IGI Global, USA.

- Peer Reviewer for Advances in Science, Technology and Engineering Systems Journal (ASTESJ), USA.
- Peer Reviewer for Journal of Computer Science, Science Publications, UAE.
- Peer Reviewer for the Journal of Engineering Research and Sciences (JENRS), USA
- Peer Reviewer for the International Journal of Clinical Practice, Hindawi.
- Peer Reviewer for the Journal of Cloud Computing and Data Science, Universal Wiser, Singapore.
- Reviewer for IEEE International Conference on Knowledge Engineering and Communication Systems (ICKECS-2022)
- Reviewer for Springer International Conference On Innovations in Intelligent Computing and Communications(ICIICC), Utkal University, India
- Peer Reviewer for the Journal of Cybernetics and Systems, Taylor and Francis Group.
- Reviewer for IEEE International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Tenerife, Canary Islands, Spain
- Reviewer at International Conference on Advanced Innovations in Smart Cities held in Jeddah, Saudi Arabia, on 23-25 January 2023.
- Reviewer at IEEE International Conference on Data Science and Network Security (ICDSNS), held at Kalpataru Institute of Technology, Tiptur on 28-29 July, 2023.
- Reviewer at International Conference on Applied Intelligence and Sustainable Computing (ICAISC-2023), held at Shri Dharmasthala Manjunatheshwara College of Engineering and Technology, Dharwad,16-17, June, 2023.
- Reviewer at IEEE International Conference on Networks, Multimedia and Information
  Technology (NMITCON) is being organized at Nitte Meenakshi Institute of Technology, Bengaluru, INDIA
  during 1-2, September 2023.
- Reviewer at IEEE INDISCON-2023 at GSSS Institute of Engineering & Technology for Women, during 5-7, August 2023
- Reviewer at IEEE International Conference on Evolutionary Algorithms and Soft Computing Techniques on (EASCT-2023) at RV Institute of Technology and Management (RVITM), Bangalore during 20-21, October 2023.
- Reviewer at the 3rd International Conference on Electrical, Computer and Energy Technologies, Cape Town, South Africa, 16-17 November 2023.
- Reviewer at IEEE International Conference on Recent Advances in Science & Engineering Technology (ICRASET) is being organized at BGS Institute of Technology, Mandya, India, during 23rd and 24th November 2023.
- Reviewer at IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS– 2023) organized by Sharnbasva University, Kalaburagi on 24 & 25 November 2023.
- Reviewer at IEEE International Conference on Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIE-2023) at Rao Bahadur Y. Mahabaleswarappa Engineering College (RYMEC), Ballari, Karnataka on 02 & 03 November 2023
- Reviewer at IEEE 3rd International conference on "Applied Electromagnetics, Signal Processing & Communication" at School of electronics Engineering, KIIT Deem to be University, Bhubaneswar on 24-26 Nov, 2023.
- Reviewer at 3rd International Conference on Mobile Networks and Wireless Communications (ICMNWC-2023) Sri Siddhartha Institute of Technology Tumkur on 8<sup>th</sup> -9<sup>th</sup> December, 2023

## Webinar Organized/ Participated

- 7 Days self-paced ICT training program on "digital content development, licensing and copyright", organized by 12OR India (international institute of organized research) on 4<sup>th</sup>-10<sup>th</sup> April 2022.
- Participated in 3 days faculty development program on 'outcome based education in higher sector' by MAR BASIL group of institute on 23<sup>rd</sup>-25<sup>th</sup> July 2020.
- International webinar on 'micro fabrication technology' organized by department of computer science and engineering, JIS college of Engineering, kalyani, Nadia, west Bengal, India on 9<sup>th</sup> July 2020.
- Webinar on 'intellectual property rights' conducted by department of mechanical engineering, mount Zion college of engineering, kadammanita, pathanmthitta, Kerala on 27<sup>th</sup> July 2020.

- Participated in 7<sup>th</sup> national conference of "**the ocean society of India**" organized by national center of polar and ocean research, ministry of earth sciences, Goa and ocean society of India on 12<sup>th</sup>-14<sup>th</sup> August 2021.
- International webinar on **monitoring and fault diagnosis using artificial intelligence techniques** organized by the department of CSE on 25<sup>th</sup> July 2020.
- Participate in UECH webinar series "Entrepreneurship & startups "on startups ecosystem in Odisha by Utkal entrepreneurship & career hub on 16<sup>th</sup> may 2020.
- Participate in UECH webinar series "Entrepreneurship & startups "on "challenges and way forward for startups intra and post covid-19" by Utkal entrepreneurship & career hub on 23rd may 2020.
- Participated in LIVE "workshop on AI tools" organized by international institute of organized research on 13<sup>th</sup> August 2023.
- Attended webinar on "COVID-19: threat or opportunity" organized by BVICAM, New Delhi on 1st august 2020.
- Attended webinar on 'Publication Ethics And Plagiarism' organized by BVICAM, New Delhi on 16<sup>th</sup> October 2020.
- Attended webinar on 'Simplifying IPR And Patent Filing' organized by BVICAM, New Delhi on 24th July 2020.
- Attended webinar on 'Optimization and Ai Techniques' Organized by BVICAM, New Delhi on 6<sup>th</sup> November 2020.
- Attended webinar on "Cyber Warfare, Cyber Security And Cyber Citizenship" organize by BVICAM, New Delhi on 18th September 2020.
- Attended webinar on "Software Defined Networking" organized by BVICAM, New Delhi on 31st October 2020.
- Attended webinar on 'Unleashing Data Science And AI' organized by BVICAM, New Delhi on 8th august 2020.
- Participated in "Online Panel Discussion On Making Mentoring Relevant: NEP 2020 Perspective" conducted by NITTTR Bhopal, Chandigarh, Chennai, and Kolkata on 21st September 2021.
- National level faculty development program on "MATLAB TOOLS AND APPLICATION" organized by department of mathematics, babu Banaras das northern India institute of technology, Luck now from august 7<sup>th</sup>-10<sup>th</sup> 2020.
- Participated in 'Online Remembrance Meeting Of Dr. A. P. J Abdul Kalam', organized by department of mathematics and IQAC of St Paul's college, kalamassery on 27th July 2020.
- Participation in "One Week Online FDP On Mathematical Modeling & Numerical Techniques 2020" conduct
  by the faculty of mathematics, department of mathematics and humanities, kakatiya institute of technology and
  science, Warangal from 27<sup>th</sup>-31<sup>st</sup> July 2020.
- Attended webinar on "How To Write A Good Research Project Proposal For Getting Grants" conducted by krushivardhan argotech on 3<sup>rd</sup> august 2020.
- Participated in webinar "Recent Trends In Antenna Engineering And Wireless Communications" delivered by dr. sachin Kumar, researcher, kyungpook national university, daegu, South Korea on 23<sup>rd</sup> January 2023.
- Participated in international webinar on 'Advances In Mathematics' organized by Tata institute of social sciences, tuliapur from 22<sup>nd</sup>-27<sup>th</sup> June 2020.
- Participated in webinar 'BEYOND 5G & 6G' delivered by dr. sukhdeep Singh, chief engineer, Samsung, Bangalore on 22<sup>nd</sup> July 2020.
- Attended webinar on 'Cross Platform Mobile App Development Using Flutter' organized by BVICAM, New Delhi on 31st august 2020.
- Participated in "One Week Online International Faculty Development Programme On Machine Learning And Computer Vision: Applications, Research Challenges", jointly organized by national institute of technology silchar, Assam & gauhati university institute of science & technology, Guwahati, Assam from august 24<sup>th</sup>-28<sup>th</sup> 2020.
- Attended an international webinar on 'Recent Trends In Medical Image Processing' organized by pg. department of information & communication technology, fakir Mohan university, balasore, Odisha on 29<sup>th</sup> august 2020.
- Attended webinar On "How To Write Technical Books?" organized by BVICAM, New Delhi on 28th august 2020.
- Completion of one week faculty development program on "Amazon Web Series" organized by VELLORE Institute of technology Chennai in collaboration with brain vision solutions India pvt.ltd & all India council for technical education from 22<sup>nd</sup>-27<sup>th</sup> august 2022.
- Participated in three-day webinar on 'Machine Learning And Its Applications' organized by department of computer science & engineering, silicon institute of technology, Bhubaneswar from 4<sup>th</sup>-6<sup>th</sup> march 2021.
- Completed a **Mendeley Training Course** with a certified mendeley advisor on 10<sup>th</sup> July 2021.
- Participated in 'Pre-Conference Tutorial' of 2<sup>nd</sup> international conference on Machine Learning, Internet Of Things And Big Data conducted by department of computer science engineering & applications on 18<sup>th</sup> December 2021.

- Participated in the national symposium on the theme "Emerging Technologies For Effective Management Of The Pandemic" organized by IETE, New Delhi, in online mode on 2<sup>nd</sup> November 2020.
- Completed **Fully Coupled Internal Space Charging Simulations With EMA3D-Internal** organized by PDH IEEE continuing education, new work on 23<sup>rd</sup> July 2020.
- Completed **Remote threats: insider risk and the remote work paradigm** organized by PDH IEEE continuing education, new work on 23<sup>rd</sup> July 2020.
- Participated in IEEE virtual tech talk: IEEE 802 networking standards-WLAN sensing.
- Participated in How to enhance your e-curriculum for distance learners with e-resources.
- Completed Engineering education 2.0: models, methods and techniques for innovation.
- Participated in **IEEE xplore webinar: how to publish open access with IEEE to increase the exposure and impact of your research** organized by IEEE advancing technology for humanity ON 6<sup>TH</sup> NOVEMBER 2020.
- Attended online workshop on "deep learning networks for image processing" organized by IEEE India council from 22<sup>nd</sup>-23<sup>rd</sup> December 2021.
- Participated in the webinar on "innovation: what, why and how?" organized by IEEE Bangalore section and IEEE India council on 19th July 2020.
- Participated in the webinar on 'IEEE resources: collabratec & vtools" organized by IEEE India council student coordination tea on 12<sup>th</sup> July 2020.
- Participated in "**five days international e-seminar on recent research in mathematics**" organized by department of mathematics, school of science, GITAM, Bangalore from 11<sup>th</sup>-15<sup>th</sup> September 2020.
- Participated in webinar "data science & artificial intelligence" organized by department of CSE& IT, school of engineering & applied sciences Rai University, Ahmedabad, and Gujarat, India on 29<sup>th</sup> July 2020.
- Completion of **15 hours of professional development by attending the CSTA 2020 virtual conference** from 13<sup>th</sup>-14<sup>th</sup> July 2020.
- Participated in the live international webinar on "**recent trend in mathematical sciences**", organized by the department of mathematics, govt. arts & science Pg. College, Ratlam, India on 6<sup>th</sup>-7<sup>th</sup> august 2020.
- Member of epidemiology foundation of India in good standing since august 2023.
- Participated in "one week international seminar on electronics and computing technology program", organized by the department of electronics, sambalpur university institute of information technology Burla, Odisha from 27<sup>th</sup> march-1<sup>st</sup> April 2021.
- Presented a paper titled "Ant Colony Optimization Based Qos Routing In Mobile Ad Hoc Network: A Mobility Model In Urban Environments" in the AESPC 2021 organized by school of electronics engineering, KIIT deemed to be university, Bhubaneswar during 26<sup>th</sup>-28<sup>th</sup> nonmember 2021.
- Participated in the international webinar on 'wireless networks and the ns-3 network simulator' organized by faculty of computer applications, Ganpat university, Gujarat, India on 20th June 2020.
- Participated in the webinar on 'applied industrial machine learning' organized by department of electronics & communications engineering, MGIT, Hyderabad on 9<sup>th</sup> august 2020.
- Participate in the webinar on "AI exploring the next generation convergence" organized by department of electronics & communication engineering, MGIT, Hyderabad on 8<sup>th</sup> august 2020.
- Participated in the international webinar on "how to turn engineers to entrepreneurs" conducted by MBITSA in association with Kerala startup mission & VSSC, ISRO from 9<sup>th</sup>-11<sup>th</sup> august 2020.
- Participated in the international webinar "business education and research in digital era" organized by Indian accounting association, Bhubaneswar branch, Odisha in collaborations with pg. department of commerce, Utkal university on 2<sup>nd</sup> august 2020.
- Completed student assessment for remote delivery conducted by IEEE.
- Completed managing remote student teams organized by IEEE.
- Completed student and data privacy when offering remote instruction organized by IEEE.
- Completed making labs effective with remote learning organized by IEEE.
- Completed ditching the traditional college lecture in remote instruction organized by IEEE.
- Completed **IEEE young professionals- we are the future!**
- Completed transparency and accountability for robots and artificial intelligence systems organized by IEEE.
- Completed post-covid-19 outlook- opportunities in the shift organized by IEEE.
- Participated in IEEE virtual tech talk: daily challenges of 4g, 5g and Iot.
- Completed intelligence control of connected and automated vehicles.
- Completed enterprise block chain for the internet of things.

- Participated in the IEEE webinar "**signal and biomedical applications based on deep learning**" by prof. Celia shahnaz, dept. of EEE, BUET, Dhaka, Bangladesh on 6<sup>th</sup> September 2020.
- Completed artificial intelligence: a guide for thinking humans.
- Completed meet the **5g network digital twin**.
- Participated in discover techniques and the end-to-end system of 5g networks virtual event.
- Participated in the one day international webinar on 'remote sensing: latest trends and perspectives' organized by computer society of India student branch, Assam university, silchar on 4<sup>th</sup> July 2020.
- Attended four days online workshop on "artificial intelligence and assistive technologies for enhancing learning
  and inclusive education: concepts, recent trends and research challenges" organized by Indian institute of
  technology Bhubaneswar and VIT, India from 18<sup>th</sup>-21<sup>st</sup> November 2021.
- Participated in AICTE sponsored short term training program under AQIS on "selenium web driver using python" online, organized by the department of master of computer application, M S Ramaiah institute of technology, Bangalore from 20<sup>th</sup>-26thNovember 2020.
- Participated in better research through better data live with the welcome trust by springer nature.
- Participated in **better research through better data live with the national institutes of health, US** by springer nature.
- Attended "3<sup>rd</sup> international conference on computing science, communication and security" organized by the ganpat university, Gujarat, India on 6<sup>th</sup>-7<sup>th</sup> February 2022.
- Participated in webinar on- "**pursuit of excellence in engineering**" organized by government engineering college, Bilaspur Chhattisgarh on 4<sup>th</sup> august 2020.
- Participated in the national webinar on "explore machine learning: tools and techniques" organized by department of CSE, RITE, Bhubaneswar on 27<sup>th</sup> July 2020.
- Completed national level e-quiz on "**gender equality**" organized by dayananda Sagar College of arts, science and commerce, Bangalore on 11<sup>th</sup> April 2020.

## Workshop/ Conference Organized

- National Workshop on Mother-tongue, Multilingualism and Internationalism at Utkal University on 27-28 April 2023
- National Workshop on Cereal Culture in Odisha, Utkal University on Feb 10, 2023
- International Conference on Innovations in Intelligent Computing and Communications (ICIICC), Utkal University, India by Springer on 16-17, Dec 2022.
- An outreach program by Fulbright India at Utkal University on Thursday, April 7, 2022.
- International Conference on "Building Intercultural Competence in Higher Education: Strengthening Local-Global Links" at Utkal University on 23-24 Sep2021.
- National Webinar on "Cyber Safety and Security in the Digital World" at Dept. of Computer Science, Utkal University, 2<sup>nd</sup> July, 2021.
- National Webinar on "International travel Grant and Full bright Fellowship" Conducted by International Office, 4th June 2021.
- National Workshop on "New Education Policy and Internationalization of Higher Education in India: Opportunities and Challenges" Conducted at Utkal university, 25-26 March, 2021
- International Conference on "Science, Society and Politics in South Asia" ICSSP-2020 conducted at Utkal University, 3 -4, March, 2020.
- Research Scholar Conclave conducted at Utkal University in July2018
- Research Scholar Conclave conducted at Utkal University in Sep2016.
- ISTE Odisha Faculty Convention on "Thinking about the Potential Impacts of BIG DATA For Development Of Countries." at CEB, Bhubaneswar on 26<sup>th</sup> and 27<sup>th</sup> DEC 2015.
- NMEICT STTP Main workshop on "Introduction to Design of Algorithm" at CEB, Bhubaneswar from 25<sup>th</sup> May to 30<sup>th</sup> May,2015
- ISTE National Workshop on "Innovation in Technology for Rural India" at CEB on 22<sup>nd</sup> FEB 2014.
- AICTE National Workshop on "Recent Security Traits on Cloud Computing" at CEB on 25th -26<sup>th</sup> Jan 2014.
- National Workshop on "BIO-INSPIRED TECHNIQUES and Application" at CEB on 29th-30th Nov 2013.
- National Workshop on "MAT LAB" at Utkal University, Bhubaneswar from 15th to 17th SEP 2013
- International Conference on Meta Computing (ICoMeC 2012) at Bhubaneswar in DEC 6th-7th, 2012
- National Workshop on "Wireless Ad-hoc Network and its Research Trends "at KISD from 28 to 29 April 2012

- AICTE National Conferences on "Advances in Mobile Ad hoc Network" at CEB, Bhubaneswar. in OCT 2009
- National Workshop on "IBM Open Source" at NIIS Group of Institutions, Bhubaneswar on 25th Sep, 2006.
- International Workshop on "Key Security to Mainframe" at IBM ,Bangalore in 18th-19th MAR-2005
- International Workshop on "Secure Data Hiding and Transportation Technique" at BIT, Bangalore in 3<sup>rd</sup> -4<sup>th</sup> APR-2005.
- International Workshop on "NDS Security" at Novell Inc, Bangalore in MAY-2005.

## Workshop/Seminar/Webinars/ FDPs/Conference Participated

- Training on Novell Netware 5 at onwards Novell Corp, INDIA at Calcutta from 1<sup>st</sup> oct to 15<sup>th</sup> oct 2002.
- National Seminar on "MAINFRAME" at ISDAC, Bhubaneswar, OCT 2003.
- National Faculty Development Program at ICFAI University, Hyderabad from 20th May to 22nd May 2004.
- Workshop on ".NET Technology" conducted by NIIT in association with Microsoft at Bhubaneswar in June 2004.
- Training on Novell NDS security at Novell Svenska, Stockholm, Sweden. FEB 2005
- Technical Education Quality Improvement Program sponsored one day seminar on "Mobile Computing and Information Management" at IGIT, Sarang on 3<sup>rd</sup> APR 2006.
- National Seminar on "Advance Computing with object oriented approach" at UTKAL UNIVERSITY.
- Workshop on "Embedded System" by IBM at IDCOL Auditorium Bhubaneswar in 12<sup>th</sup> MAY 2007.
- Workshop on "Advanced Operating System" at College of Engineering Bhubaneswar from 8<sup>th</sup> to 10<sup>th</sup> DEC 2007.
- AICTE National Workshop on "Computational Learning Theory" at CEB, Bhubaneswar on 27<sup>th</sup> and 28<sup>th</sup> SEPT, 2008.
- Training Program on "Data Warehousing concepts and tool" held at Infosys Technologies Ltd., Bhubaneswar from 29<sup>th</sup> September to 1st October 2008.
- 2 Days Workshop on Real Time Operating System at KIST, Bhubaneswar in FEB 2009.
- FDP by AICTE on "Induction Training for Teachers of Engineering on Optimization in Engineering" at IIMT Bhubaneswar from 24<sup>th</sup> AUG to 5<sup>th</sup> SEP 2009.
- National Conference on "Advance Operating System" at TRIDENT Academy in 5<sup>th</sup>-7<sup>th</sup> Sep-2009
- Performance Enhancement on Multi-Core processors & GPUS at C-DAC, Bangalore in June 21-24, 2010.
- International Conference on "Computational Vision & Robotics "at IIMT Bhubaneswar on 21st and 22nd August 2010.
- National Conference on "Emerging Trends and Technology" at SIMS Indore from 18<sup>th</sup> to 20<sup>th</sup> NOV 2010 and Presented a paper on "Hidden threats to security system in MANET"
- National workshop on "Parallel and Distributed Computing" at SIT, Bhubaneswar on 16th July, 2011.
- National Symposium on "HPC in Academia & Beyond" and FDP on "Current Trends in Distributed Operating System "at Institute of Engineers, Bhubaneswar on 21st and 22nd FEB 2012.
- National Workshop on "Network Simulator (NS2) and Applications" at TAT, Bhubaneswar from 17<sup>th</sup> to 20<sup>th</sup> MAR,2012.
- International Conference on Innovative Computing and Information Processing at Mallasamudram, Tamilnadu from 29<sup>th</sup> to 31 MAR,2012 and presented a paper on "Clustering approach towards wormhole attack in IDS based MANET"
- International Conference on Meta Computing (ICoMeC 2012) at Bhubaneswar on DEC 6-7, 2012.
- National Workshop on "VLSI and Embedded System" at CTTC, Bhubaneswar on 20th JAN 2013.
- National Workshop on "MAT LAB "at Utkal University, Bhubaneswar from 15<sup>th</sup> to 17<sup>th</sup> SEP 2013.
- National Workshop on "BIO-INSPIRED TECHNIQUES and Application" at CEB on 29th-30th Nov 2013.
- AICTE National Workshop on "Recent Security Traits on Cloud Computing" at CEB on 25th -26<sup>th</sup> Jan 2014.
- ISTE National Workshop on "Innovation in Technology for Rural India" at CEB on 22<sup>nd</sup> FEB 2014.
- ISTE Workshop on "Computer Programming" By IIT Bombay from 20th May to 21st June 2014.

- ISTE Workshop on "Computer Networking" By IIT Bombay from 30<sup>th</sup> June to 5<sup>th</sup> July 2014.
- ISTE Workshop on "Cyber Security" By IIT Bombay from 10<sup>th</sup> July to 20<sup>th</sup> July 2014.
- FDEP by Infosys, TCS and Wipro from 2009 to 2014.
- ISTE-STTP on "Pedagogy for Effective use of ICT in Engineering Education" by IIT Bombay from 5<sup>th</sup> JAN to 31<sup>st</sup> JAN 2015.
- NMEICT STTP Coordinators workshop on "Introduction to Design of Algorithm" at IIT, Kharagpur from 16<sup>th</sup> MAR to 20<sup>th</sup> MAR,2015.
- NMEICT STTP Main workshop on "Introduction to Design of Algorithm" at CEB, Bhubaneswar from 25<sup>th</sup> May to 30<sup>th</sup> May,2015.
- ISTE Odisha Faculty Convention on at CEB, Bhubaneswar on 26<sup>th</sup> and 27<sup>th</sup> DEC 2015 and presented a paper on "Thinking About The Potential Impacts Of BIG DATA For Development Of Countries."
- Research Scholar Conclave at Utkal University on 30<sup>th</sup> April 2016 and presented a paper on "Clustering and service approach in Mobile Ad-hoc Network-A Review"
- GIAN course on "Modelling and Analysis of Cyber Physical Systems" by Ministry of HRD at IIT, Bhubaneswar from 08th July to 20th July 2016.
- GIAN course on "Applied Cyber Security" by Ministry of HRD at IIT, Bhubaneswar from 05<sup>th</sup> AUG to 12<sup>th</sup> AUG-2016.
- "Analytical Study of Scalability in Coastal Communication Using Hybridization of Mobile Ad-hoc Network: An Assessment to Coastal Bed of Odisha". International Conference on Innovations in Bio-Inspired Computing and Applications, December 16-18, 2019, Springer.
- "Node Mobility and link Stability: A Geographical Mapping System rather than GIS in Disaster Management." International Conference On Science, Society and Politics in South Asia ,ICSSP-2020, 3-4 March, 2020.
- "Geographical Mapping System (GMS): An improved GIS in Disaster Management" National Conference of the Ocean Society of India, OSICON 2021, 12-14 August, 2021.
- "Building Intercultural Competence in Higher Education: Strengthening Local-Global Links" International Conference at Utkal University on 23-24 Sep2021.
- "Plasma Technology and Related Instrumentation for Monitoring and Control", SERB sponsored Workshop. By CSIR-IMMT, Bhubaneswar, 17-18 May, 2022.
- One week Faculty Development Program On "Amazon Web Services" Organized by Vellore Institute Of Technology, Chennai, 22<sup>nd</sup> -27<sup>th</sup> August 2022,

#### **EDUCATION & CREDENTIALS**

## **Academic**

- Ph. D in Computer Science at Utkal University, Bhubaneswar, INDIA
- M.Tech in Comp.Sc&Engg, ITER, SOA University, Bhubaneswar, INDIA
- MCA from IGNOU, New Delhi., INDIA
- **B.Sc** (Mathematics), Sambalpur University, INDIA
- GATE Qualified.

#### **Professional**

Diploma in International Affairs and Diplomacy, Indian Institute of Governance and leadership., New Delhi

#### **Technical**

- CNE (Certified Novell Engineer) from Onwards Novell INDIA, Bangalore in 2000.
- DCH (Diploma in Computer Hardware) from CGIHT in 1999.
- ADCN from CGIHT, Bhubaneswar in 1999.
- Software proficiency with windows base all Operating system(NT,2000,XP,2007),UNIX, Linux, MAC OS, MS Office, VB, Oracle, SQL Server, Web Base application, Multimedia tools(Flash, Photoshop, Dream Weaver),ASP, Java script.
- Language proficiency with TCL, ASSEMBLY, C&C++ and Web Programming languages. Perform shell scripting or other basic scripting tasks.

- Hardware proficiency with maintenances of all IBM compatible system including installation and configurations. Evaluate networking software, operating system software and software applications
- Networking proficiency with network design ,Installation ,Configuration ,Administration and giving security for the Novell Netware (3.11,4.11,5.0,5.11),Windows NT,2000,UNIX,Linux. Implement network traffic and security monitoring software, and optimize server performance
- Proper understanding all types of hardware including routers, switches, wires and other essential equipment.
- Knowledge of IP addressing and some common networking protocols like IPv4 and IPv6.
- Knowledge of various Networking Services such as directories, files, distributed applications, email, HTTP, FTP, DNS and some other common services.
- Knowledge of security maintenance using encryption, firewalls, IDS, anti-virus, anti-spam etc.
- Knowledge of ISP/Communication Providers and Virtual Private Networks (VPNs).
- Operate master consoles to monitor the performance of computer systems and networks and to co-ordinate access and use of computer networks.
- Perform routine network start up and close down and maintain control records. Perform data backups and disaster recovery operations. Control and monitor e-mail use, Web navigation, and installed software's.
- Database proficiency with maintaining database for SQL Server and Oracle8i, 9i.
- Simulation proficiency with NS2, NS3, NetSIM and MATLAB.

## Microsoft Virtual Academy (MVA) Certifications

- Querying Microsoft SQL Server 2012 Databases Jump Start
- From Data to Insight and Impact: The BI Revolution
- Introducing Azure Data Lake
- Implementing Big Data Analysis
- Implementing a Data Warehouse with SQL Server Jump Start
- Microsoft Azure Machine Learning Jump Start
- Faster Insights to Data with Power BI Jump Start
- Querying with Transact-SQL

## PERSONAL PROFILE

Name : Dr. Sanjaya Kumar Sarangi

Father's Name : Gokula Ch Sarangi

Mother's Name : Mrs. Soubhagyabati Sarangi

Date of Birth : 13<sup>th</sup> July 1977

Sex : Male

Marital Status : Married

Nationality : Indian

Religion : Hindu

Linguistic Proficiency : Oriya, Hindi, English

Hobby : Listening & singing old songs, Visiting New places.

Co-circular acts : Playing Badminton, Cricket, and Singing.

Passport No : H8228981

Driving Licence No : OR-0220020144405

Blood Group :  $B^{+ve}$ 

## **Social Activities**

- Member at Odisha Durninitee Sangharsha Mancha.
- Member of Drusti Daan in association with LV Prasad Eye Institute, Bhubaneswar
- Member of Temple Seva Trust, Acharya Vihar, Bhubaneswar
- Member of Bal Ashram in association with IOCL ,India

## **Personality Traits and Strength**

I am skilled with an effective organizer and planner for which my outgoing and friendly nature allows me to interact well with staff members at all levels and able to bridge the gap between technical and non-technical persons. Enjoy to work under tight and pressure conditions, fun loving and always full of enthusiasm, hate back biting and ignorance. Hard Working, Honest, Sincere, Dedication and having a positive attitude towards life.

## **REFERENCES**

1. Prof. Sabita Acharya

Vice Chancellor, Utkal University, Bhubaneswar sabita.acharya@utkaluniversity.ac.in

2. Prof. Soumendra Mohan Patnaik,

Former VC, Utkal University and Professor, School of Anthropology, University of Delhi, India smp\_du@yahoo.com

3. Prof. Sateesh Ku. Pradhan

Former Professor, Dept. of Comp.Sc, Utkal University. sateesh1960@gmail.com

4. Prof.(Dr) Amiya Kumar Rath

Vice Chancellor, BPUT and Professor, VSSUT, Burla, Odisha, India

5. Dr. Mrutyunjaya Panda

Dept. of Comp.Science, Utkal University

6. Prof. Prafulla Ku. Behera

Dept. of Comp.Science, Utkal University

## **DECLARETION**

I hereby declare that all statements stated above are true, complete and correct to the best of my knowledge and belief.

Date :

Place : Bhubaneswar

(Sanjaya Kumar Sarangi)