

# VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING &

## TECHNOLOGY KNOWLEDGE ASSET 2021-22



Name: DR. N. SANDHYA

Designation: Professor & Head of the Department

Department: Computer Science & Engineering – (AIML & IoT)

Mail ID: sandhya\_n@vnrvjiet.in

Experience (in years): Teaching: 23 Research: 16

AICTE ID: 1-2188921504 DoB: 15<sup>th</sup> March, 1978

### 1. Educational / Technical qualifications:

| S.No | Level (UG / PG / Ph.D) | Year of passing | Specialization |
|------|------------------------|-----------------|----------------|
| 1.   | Ph. D                  | 2012            | CSE            |
| 2.   | M.TECH                 | 2007            | CSE            |
| 3.   | B.TECH                 | 2000            | CSE            |
|      |                        |                 |                |

### 2. Teaching and Learning:

#### 2.1. Teaching Interests:

Artificial Intelligence, Machine Learning, Data Warehousing & Data Mining, Information Retrieval Systems, Data Science, Design and Analysis of Algorithms, Object Oriented Programming, Database Management System, Data Analytics, Cloud Computing, Operating System, Design Thinking

#### 2.2. Novel Teaching & Learning Techniques adopted:

- Learning by Doing
- MOOCS
- WIT and WIL
- NPTEL
- Active learning (Videos, PPT etc.)
- Developing Digital Content

### 2.3. Involvement in curriculum updating / Design:

- Chairman BOS – Participated in the design of the curriculum for Computer Science and Engineering-AIML and IoT.
- Developed Programs in Machine Learning and Neural Networks Lab
- Articulating Design Thinking Syllabus at Ist Year Level and IIIrd Year Level  
Articulating Syllabus for training in Machine Learning and trained students ·  
Developed use cases in AIML

### 3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Reading books, Surfing

3.2. CCA/ECA Organized: Hackathons,

3.3. CCA/ECA participated:

- Mini and Main Project Coordinator
- Program Coordinator for blended MOOCs initiative from IIT Bombay
- Paper setting / evaluation of academic examinations.
- Chair & Member review Committee for International Conferences
- Remote Center Coordinator T10kT Workshops under NMEICT, MHRD

3.4. Counseling and Mentoring Activity: Mentoring 20 Students

3.5. Committees involved in:

Department level: BoS, NBA (UG & PG), NAAC

Institute Level: Remote Center Coordinator for T10KT sponsored by MHRD, Govt. of India, under the National Mission on Education through ICT, Head and member of various event organizing committees

### 4. Conference / Workshop / Seminar / Guest Lectures:

4.1. Conducted:

- Program Coordinator for MeitY, Govt.of India sponsored Faculty Development Program on “ Sensor Networks and Internet of Things” organized under E&ICT Academy in association with NIT Warangal
- Convenor for the Faculty Development Program on “Matlab” (27-28 March 2014) under Teqip phase-II
- Convenor for the Faculty Development Program on “Soft Computing & Machine Learning” (03-08 March 2014) under Teqip phase-II
- Convener for the Faculty Development Program on “J2ME” (18-20 Feb 2013) under

## Teqip phase-II

- Co-convener of the National Conference on “Emerging Trends of Computing Technologies” (18-19 Mar 2013) organized under Teqip phase-II
- Convener for a Two day National Conference on Artificial Intelligence “NCAI-2007” Theme: “ AI and it’s Scope”
- Convener of the Two Day Workshop on “ Big Data & Hadoop” (27-28<sup>th</sup> November 2015) at VNRVJIET under TEQIP-II
- Contributed as Remote Center Coordinator for TWO Week ISTE STTP on ‘Technical Communication’ conducted by IIT Bombay ( 8<sup>th</sup> Oct-5<sup>th</sup> Dec 2015) under NMEICT, MHRD
- Contributed as Remote Center Coordinator for TWO Week ISTE STTP on ‘Introduction to Structural Engineering’ conducted by IIT Kharagpur ( 30<sup>th</sup> Nov 2015-3<sup>rd</sup> Jan,2016) under NMEICT, MHRD
- Contributed as Remote Center Coordinator for four week AICTE approved FDP by IIT Bombay “Use of ICT in education for online and blended learning” under the National Mission on education through ICT (MHRD) May 2nd-July 10th, 2016.
- Contributed as Member, Technical Committee International Advanced Computing Conference IACC 2017 organized by IEEE computer society-India Council at SRKR engineering College during Feb 27-28,2016.
- Contributed as Remote Center Coordinator for four-week AICTE approved FDP by IIT Bombay “Use of ICT in education for online and blended learning” under the National Mission on education through ICT (MHRD) May 2nd-July 10th, 2016.
- Contributed as Remote Center Coordinator for Two-Week ISTE STTP on "CMOS, Mixed Signal and Radio Frequency VLSI Design" by IIT Kharagpur under the National Mission on education through ICT (MHRD) during Jan 30 - Feb 4, 2017.
- Contributed as Remote Center Coordinator for two-week ISTE STTP on “Electric Power System” by IIT Kharagpur under the National Mission on education through ICT (MHRD) July 10th-July 15th, 2017.
- Contributed as Remote Center Coordinator during the face to face interaction on 19 and 20 August 2017 for the two week FDP by IIT Bombay on “ Foundation Program in ICT for education” under the PMMM National Mission for Teachers and Teaching (PMMMNMTT) MHRD.
- Contributed as Remote Center Coordinator during the face to face interaction on 16-17 September 2017 and 7-8 October 2017 for the two week FDP by IIT Bombay on “ Pedagogy for Online and Blended Teaching-Learning Process” (FDP201x) under the PMMM National Mission for Teachers and Teaching (PMMMNMTT) MHRD.
- Contributed as Remote Center Coordinator during the face to face interaction on 6-7 October 2018 for the two-week FDP by IIT Bombay on “Foundation Program in ICT for Education” under the PMMM National Mission for Teachers and Teaching (PMMMNMTT) MHRD
- Convener for one week FDP on “Artificial Intelligence and Machine Learning” at VNRVJIET, Hyderabad (15-06-2020 to 19-06-2020)
- Convener for one week FDP on “Design Thinking in Engineering Education” at VNRVJIET, Hyderabad (08-06-2020 to 13-06-2020)
- Convener for one week FDP on “Design Thinking in Engineering Education” at

VNRVJIET, Hyderabad (15-06-2020 to 20-06-2020)

- Convener for one week FDP on “Artificial Intelligence and Machine Learning” at VNRVJIET, Hyderabad (13-07-2020 to 17-07-2020)
- Organised workshop on “ Internet of Things” 6th to 7th Jan, 2022 for CSE-IoT students
- Organised Design Thinking FDP for Geetanjali College of Engineering from 24th to 29th January, 2022

#### 4.2 Attended:

- “Trends in Research and Development – An Academic Perspective” 1day workshop organized by JNTUH, Kukatpally,Hyderbad-2009.
- “International Conference on Advanced Computing Technologies ICACT-2008” Two days Conference organized by GRIET
- “International Conference on Advanced Computing Methodologies 2011”
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- 2 days Conference organized by GRIET
- Faculty training program held by Accenture – A 2 day workshop organized under the aegis of the Nasscom IT Workforce Development-2007
- “Algorithms and Data Mining”, 4 day National Workshop organized by School of Computing Technologies, GRIET-2008
- Faculty Development Program on “Teaching Methodologies” 2 day workshop organized by GRIET-2007
- “Emerging Trends in Data Mining” 2 weeks AICTE sponsored Staff Development Program organised by School of Computing, GRIET
- 14th “Pacific Asia Conference on Knowledge Discovery and Data Mining” (PAKDD 2010) 4 days Conference organized by IIIT, Hyderabad
- “WebMining” 1 day workshop organized by UGC-Academic Staff College JNTUH, Kukatpally, Hyderbad-2011
- 3 day Faculty Development Program on “System Software Development” 21-23 Feb 2013 under Teqip phase-II
- Workshop organized by GRIET on “Web Technology and Content Development” (7-9 Jan 2013) under Teqip phase-II
- 2 day Faculty Development Program on “Android Application Development” (27-28 Feb 2013) under Teqip phase-II
- 3 day NBA workshop organized by JNTUH” (13-15 May 2013) under Teqip phase-II

- 2 weeks AICTE sponsored Staff Development Program organised by VNR VJIET on “Recent Trends in Cloud Computing and Security”
- 2 weeks (21-31 May 2013) ISTE Workshop on “Database management Systems” conducted by Indian Institute of Technology, Bombay under the National Mission on Education through ICT(MHRD)
- Participated in the TEQIP conclave on “Enhancing Quality of Technical Education and Research” held at IIT Hyderabad (August 30-31,2013)
- Participated in the AICTE sponsored two day International Conference on “Consumer Dynamics and Marketing Strategies in the Globalized Economic Era-Perspective and Challenges” held at GRIET (29-30 October, 2013) · Participated in the one day workshop on “Software Offerings to Academics” held at JNTU, Hyderabad (23 November 2013)
- Participated in a pre-conference workshop on “Advanced Computing and Pattern Recognition-2014 (ACPR-14) held on January 7,2014
- Participated in two days workshop on Network Simulation using NS-2 under TEQIP II held at GRIET during January 8 to 9,2014 in association with Sai Infocorp Solution Pvt. Ltd. Pune
- Participated in the MHRD’s National Mission for Teachers and Administrators Management Enhancement Programme held at The Indian Institute of Management, Indore during January 12th to 18th, 2014
- Participated in a 2 weeks (20<sup>th</sup> May 2014 to 21<sup>st</sup> June 2014) ISTE Workshop on “Computer Programming” conducted by Indian Institute of Technology, Bombay under the National Mission on Education through ICT (MHRD)
- Participated in one day workshop on NBA under Teqip-II at VNRVJIET on 19<sup>th</sup> July,2014
- Participated in the 3 day(4-6<sup>th</sup> Aug,2014) workshop on “Engineering the Education Scenario towards a Learner Centric Environment “under Teqip-II
- Participated in the 3 day(4-6<sup>th</sup> Sep,2014) workshop on “Big Data Analytics and Cloud Computing” under Teqip-II
- Participated in the Faculty Development Programme (5<sup>th</sup> Sep,2014) on “Introduction to Cloud Context & Cloud Models and Capabilities” held by TCS
- Participated in the TEQIP –II sponsored workshop on “ Design of POGIL activities

for  
Outcome Based Education” (08-09<sup>th</sup> Dec,2014) at VNRVJIET

- Participated in the National Nodal Centre Conference (21<sup>st</sup> Feb,2015) on “Virtual labs” held by VALUE Virtual Labs at Amrita Vishwa Vidhyapeetham University.
- Participated in a 2 weeks (27<sup>th</sup> April 2015 to 30<sup>th</sup> May 2015) ISTE Workshop on “Introduction to Design of Algorithms” conducted by Indian Institute of Technology, Karagpur under the National Mission on Education through ICT (MHRD)
- Participated in a 1 week (27<sup>th</sup> Nov-2<sup>nd</sup> Dec 2016) MeitY, Govt.of India sponsored FDP on “ Sensor Networks and Internet of Things”
- Participated in the four-week AICTE approved FDP on “Use of ICT in education for online and blended learning” by IIT Bombay under the National Mission on education through ICT (MHRD) May 2<sup>nd</sup>-July 10<sup>th</sup>, 2016.
- Participated in one week MeitY sponsored FDP on “Data Analytics with R” E& ICT Academy, NIT Warangal May 15<sup>th</sup> May-20<sup>th</sup> May, 2017.
- Participated in a three-day FDP on “Big Data Techniques & Tools” at VNRVJIET in collaboration with Ashira Laboratories Pvt. Ltd. May 13<sup>th</sup> Dec-15<sup>th</sup> Dec 2017.
- Participated in a one-week FDP on “Big Data Analytics” at VNRVJIET in collaboration with CSI 25<sup>th</sup> June-30<sup>th</sup> June 2018.
- Participated in a one-week AICTE-ISTE refresher program on “Intelligent Computing and Deep Learning” at VNRVJIET 14<sup>th</sup> May -19<sup>th</sup> May 2018. · Participated and top performer in the two-week FDP on “Mentoring Educators in Educational Technology (FDP301X) “conducted by IIT, Bombay from May 17,2018 to July 05, 2018 under the aegis of PMMMNMTC, MHRD.
- Participated in a 5 day faculty development program on " Academic research in Engineering for Industry and Patents" organised by CSI Hyderabad chapter, Entrepreneurship and Innovation cell, R&D and Consultancy Cell, MVSR Engineering College 1<sup>st</sup> June to 5<sup>th</sup> June,2020
- Participated in one-week MeitY sponsored FDP on “Deep Learning and its Applications” organized by E& ICT Academy, NIT Patna June 17<sup>th</sup> -22<sup>nd</sup> June 2020
- Participated in two-weeks MeitY sponsored FDP “Online Faculty Development Programme on Machine Learning for Computer Vision” jointly organized by Electronics & ICT Academies during June29- July8, 2020 under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the Ministry of Electronics and Information Technology(MeitY),Government of India.

- Participated in 40- hours online FDP on “Data Science for All” organized by Electronics & ICT Academy, NIT Warangal, IIITDM Jabalpur and NIT Patna July 27th -08th Aug 2020
- Participated in IUCEE Annual Leadership Summit-2021 9-11th July, 2021 · Participated in one week FDP on: “R Programming: A Practical Approach at VNRVJIET
- Online short term course on “ Data Visualisation for Deep Learning using Power BI and Tableau” organized by NIT Warangalin association with CCE, NIT Warangal from 23.02.23 to 28.02.23

## **5. Academic Contribution and Research & Consultancy:**

### **5.1. Invited Lectures:**

- Presented paper titled “A Variant Agglomerative Approach for Text Document Clustering” at National Conference on “Modern Trends in Computer Science and Technology” in Association with CSI (3-4 May 2013)
- Invited Talk on ‘Java Technologies” in a FDP organized under Teqip phase II · Invited Talk for 4 sessions on DataWarehousing and Data Mining in AICTE Sponsored 2 week FDP on “Recent Trends in Global Data Mining and DataWarehousing” at QIS College of Engineering ,Ongole (16-29 May 2013)
- Presented paper at International Conference on “Advanced Computing Methodologies 2013” ICACM (Aug 02-03,2013) under Teqip-II
- Presented paper titled “Text Document Clustering with an improved K Modes Approach” at National Conference on “Modern Trends in Computer Science and Technology” in Association with CSI (3-4 May 2013)
- Presented paper in National Conference on “Advanced Computing and Pattern Recognition” ACPR-14 in Association with CSI and ISTE (8-9 Jan 2014) · Resource person for a guest lecture on “Applications of Greedy Method” at Geethanjali College of Engineering & Technology (5 Feb-2014)
- Invited Talk on Research in Text Mining at Teqip-II Sponsored 1 week FDP on “Soft Computing & Machine Learning”(03-08 March 2014)
- Resource person for a guest lecture on “Clustering Techniques” at CVSR College of Engineering (11 March-2014)
- Presented paper in International Conference on ICT for bridging future (Dec 12-14, 2014)

- organized by CSI Hyderabad Chapter in association with JNTUH and DRDO. · Resource person for a guest lecture on “Advanced Data Mining Techniques” at School of Information Technology, JNTUH (04 March-2014)
- Presented paper titled “Document clustering with concept based vector suffix tree document” in National Conference on “Research Trends in Computer Science & Technology” (NCRTCST-2015) (9-10 October 2015)
  - Resource person for a guest lecture on “Advanced Data Mining Concepts” at Rishi M.S Institute of Engineering and Technology for Women, (11 September-2015) · Resource person for a guest lecture on “Big Data and Data Analytics” at Malla Reddy Engineering College, (28 September-2015)
  - Presented paper titled “Issues and Challenges on Big Data - A Survey”, at International Conference on Research Advancements in Engineering Science and Information Technology 15-16 Dec, ICRAESIT -2015
  - Acted as resource person for 2 sessions on Clustering Techniques sponsored 3 week Refresher Course on “Data Mining Techniques by UGC at UGC-Human Resource Development Centre, JNTUH, Kukatpally (17-10-2016-05-11-2016 UGC-Human Resource Development Centre, JNTUH, Kukatpally (17-10-2016-05-11-2016)
  - Acted as resource person for 2 sessions on Enabling Technologies of IoT and Design Methodology of IoT in the UGC sponsored 3-week Refresher Course on “Internet of Things” at UGC-Human Resource Development Centre, JNTUH, Kukatpally (09-10- 2017 to 30-10-2017)
  - Presented paper titled “Study of galaxy evolution through GA-SVM at 2nd International Conference on Smart Computing and Informatics 27-28 Jan, SCI -2018 in association with Springer at PVPSIT
  - Presented paper titled “Mean estimation under post-stratified cluster sampling scheme” at 1st International Conference on Artificial Intelligence and Cognitive Computing (AICC 2018) 02-03 Feb, AICC -2018 in association with Springer at MLRIT
  - Presented paper titled “Analysis of Soft Computing Techniques to Forecast Mechanical Attributes of an Alloy” at 5th International Conference on Recent Trends in Machine Learning, IoT, Smart Cities 28-29th March, ICMISC -2020 at CMR Institute of Technology, Hyderabad.
  - Acted as resource person for one week FDP on “Artificial Intelligence and Machine Learning” at VNRVJIET, Hyderabad (15-06-2020 to 19-06-2020)
  - Acted as resource person for one week FDP on “Design Thinking in Engineering Education” at VNRVJIET, Hyderabad (08-06-2020 to 13-06-2020)
  - Acted as resource person for one week FDP on “Artificial Intelligence and Machine



Learning” at VNRVJiet, Hyderabad (13-07-2020 to 17-07-2020)

- Acted as resource person for one week AICTE Sponsored Online Short Term Training Program (STTP) on “Advances in Computing using Emerging Technologies in Smart Environment” organized by the department of Computer Science and Engineering of Institute of Aeronautical Engineering from 2-7 November 2020 and delivered a session on the topic “Overview on Artificial Intelligence Searching Methods” on 3 November 2020.
- Acted as resource person for 1-Week National-level Online Faculty Development Program on “Design Thinking” at SRKR ENGINEERING COLLEGE, Andhra Pradesh and this was a consultancy based outsourcing program through CPADT
- Acted as a keynote speaker for a two day national online workshop on “Basics on Design Thinking” on 4th and 5th December 2020 organized by Department of Mechanical Engineering in association with ANITS IIC
- Acted as a resource person to deliver guest lecture on “Artificial Intelligence-Research Trends” for III Year CSE students at Geetanjali College of Engineering on 06th Jan, 2021 · Delivered Invited Talk in Machine Learning at Mother Teresa Institute of Science and Technology, Sathupally on 07th July, 2021
- Delivered a talk on “Search Strategies in Artificial Intelligence” in the 4-day hybrid event “IEEE SPS Seasonal School on Recent Advances in Artificial Intelligence for Signal Processing” from 28th -31st December 2021 organized by VNR Vignana Jyothi Institute of Engineering and Technology in association with SPS IEEE Hyderabad Section and WIE AG IEEE Hyderabad Section.
- Delivered a talk on “Search Strategies in AI” for 2 sessions in the Two-week Online Refresher Course on “Artificial Intelligence” from 23-05-2022 to 04-06-2022 organised by The UGC-Human Resource Development Centre, JNTUH on 28.05.2022.

5.2. Articles / Chapters published in Books: Book on Artificial Intelligence

5.3. Books published as single author or as editor: NIL

5.4. Projects Guided:

a) UG: 39

b) PG: 16

5.5. Research Interests: Applied AI, Data Engineering, Soft Computing

5.6. Ph.D. students:

a) Enrolled: 5

b) Submitted: 0

c) Awarded: 2

5.7. Papers published in reviewed Journals:

| S.No | Title of the Paper   | Journal Name Vol.No. PP   | ISBN/ISSN No.        | Impact Factor/ Citation Index | National/ International |
|------|--|---|----------------------|-------------------------------|-------------------------|
| 1    | Analysis of Stemming Algorithm for Text Clustering                   | International Journal of Computer Science                                       | ISSN: 1694-08143     | 6                             | International           |
| 2    | An Improved Approach for Document Retrieval Using Suffix Trees       | International Journal of Advanced Computer Science and Applications(IJACSA),USA | ISSN No: 2156- 55708 | 1                             | International           |
| 3    | Farthest Neighbor Approach For Finding Initial Centroids For K-Means | International Journal of Data Engineering Communication Engineering             | ISSN: 2180-1274      |                               | International           |
| 4    | Analysis of Similarity Measures with Word Net based Text             | International Journal of Advances in Intelligent and Soft Computing             | ISSN: 1867-5662      | 3                             | International           |

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|--|---------------------|--|--|--|--|
|  | Document Clustering |  |  |  |  |
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|----|---|--|-----------------|------------------------------|---------------|
| 5  | Rank Analysis Through Poly analyst using Linear Regression          | International Journal of Computer Science and Network Security                     | ISSN: 1738-7906 | 3<br>Thoms on Reuter indexed | International |
| 6  | Analysis of Similarity Measures for Text Clustering                 | International Journal of Data Engineering  | ISSN: 2180-1274 | 3                            | International |
| 7  | Neighbor Based Text Document Clustering                             | International Journal of Computer Science and Information Security                 | ISSN: 1947-5500 | 0.42                         | International |
| 8  | A Semantic Web Approach for Improving Ranking Model of Web Document | International Journal of Computer Applications<br>Volume 7– No.13,<br>October 2010 | ISSN: 0975-8887 | 0.835                        | International |
| 9  | A Framework for Deep Web Crawler Using Genetic Algorithm            | International Journal of Electronics and Computer Science Engineering (IJECSE)     | ISSN- 2277-1956 |                              | International |
| 10 | Subset K Means Approach for handling Imbalanced Distributed Data    | International Journal of Advances in Intelligent and Soft Computing,<br>Volume 2   | ISSN: 1867-5662 |                              | International |

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|----|--|--|-----------------|--|---------------|
| 11 | To detect tracking system of parking vehicle by using sensors and Aurdino YUN device | IJJET  | ISSN:2319-1058  |  | International |
| 12 | Concept based text document clustering with vector suffix                            | International Journal of Computer Science and Information Security | ISSN: 1947-5500 |  | International |

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|----|--|--|-------------------|--|---------------|
|    | tree document model  |  |                   |  |               |
| 13 | Analysis of Classification Techniques for Efficient Disease Prediction | International Journal of Computer Applications | ISSN: 0975-8887   |  | International |
| 14 | Document clustering with concept based vector suffix tree document     | IJECCE   | ISSN: 2249-071X   |  | International |
| 15 | An Effective Atlas-guided Brain image identification using             | IJSER Volume 7, Issue 12, December 2016        | ISSN<br>2229-5518 |  | International |

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|----|---|--|------------------------------------|--|---------------|
|    | X-rays  |  |                                    |  |               |
| 16 | Issues and Challenges on Big Data - A Survey  | IARJSET Volume 2, Issue 2, December 2015                             | ISSN<br>2393-8021                  |  | International |
| 17 | Analysis of Variant Approaches for Initial Centroid Selection in K Means Clustering Algorithm | Springer SIST  | ISSN<br>2190-3018                  |  | International |
| 18 | A Survey On Stream Processing And Streaming Analytics For Real - Time Big Data                | International Journal of Latest Trends in Engineering and Technology | ISSN:2278-621X                     |  | International |
| 19 | Fusing Data Retrieved From Heterogeneous Sources To Predict User's                            | Journal Of Theoretical And Applied Information Technology            | E-ISSN 1817-3195 / ISSN 1992- 8645 |  | International |

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|  | Health |  |  |  |  |
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|----|--|---|--|--|---------------|
| 20 | Mammogram Images Detection Using Support Vector Machines   | International Journal of Advanced Research in Computer Science          | ISSN: 0976-5697  |  | International |
| 21 | Tongue Image Analysis For Hepatitis Detection Using Ga-Svm   | Indian Journal of Computer Science and Engineering                      | e-ISSN:0976-5166p-<br>ISSN:2231-3850                           |  | International |
| 22 | Bullet Classification System Based On Image Processing & Support Vector Machine                                      | International Journal of Advanced Technology in Engineering and Science | ISSN: 2348-7550  |  | International |
| 23 | Supervised SVM Classification of Rainfall Datasets   | Indian Journal of Science and Technology                                | ISSN (Print) :<br>0974-6846<br>ISSN<br>(Online) :<br>0974-5645 |  | International |
| 24 | Parallel And Distributed Processing For Virtual Mapreduce Clusters By Using Improved Hybrid Job Scheduling Algorithm | International Journal of Advanced Research in Computer Science          | ISSN: 0976-5697  |  | International |

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|----|---|---|---|--|---------------|
| 25 | Mean Estimation Under Post Stratified Cluster Sampling Scheme | Springer AISC Series                                | ISSN: 2194-5357                                 |  | International |
| 26 | Issues Of Big Data Streams                                    | Journal of Information and Communication Technology | ISSN Print 1675- 414 X<br>ISSN Online 2180-3862 |  | International |

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|----|--|--|---|-----|---------------|
| 27 | Mathematical Modeling of Rayleigh Type Surface Waves   | IJRECE   | ISSN: 2393-9028 (PRINT)<br>  ISSN: 2348-2281 (ONLINE) |     | International |
| 28 | Analysis Of Sar Images Texture Using Rim Support Vector Machines   | ARNP Journal of Engineering and Applied Sciences                                     | ISSN 1819-6608  |     | International |
| 29 | Particle Grey Wolf Optimizer (PGWO) Algorithm and Semantic Word Processing for Automatic Text Clustering | International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems (IJUFKS) | (print): 0218-4885   ISSN (online): 1793-6411         | 1.2 | International |

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|----|--|--|-----------------|--|---------------|
| 30 | Multi Sensor Image Matching using Super Symmetric Affinity Tensors based HyperGraph Matching | International Journal of Recent Technology and Engineering | ISSN: 2277-3878 |  | International |
| 31 | A Survey On Data Science Approach to Predict Mechanical Properties of Steel                  | Learning and Analytics in Intelligent Systems              | ISSN: 2662-3447 |  | International |
| 32 | Prediction of Mechanical Properties of Steel using Data Science Technique                    | International Journal of Recent Technology and Engineering | ISSN: 2277-3878 |  | International |
| 33 | Forecasting And Predicting   | Journal of Critical Reviews                                | ISSN- 2394-5125 |  | International |

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|--|---|--|--|--|--|
|  | Stock Market Trends Using Feature Selection |  |  |  |  |
|--|---|--|--|--|--|



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|----|--|---|---|--|---------------|
| 34 | An Effective Model for Handling the Big Data Streams Based on the Optimization-Enabled Spark Framework                                     | Advances in Intelligent Systems and Computing                                 | ISSN: 2194-5357                                       |  | International |
| 35 | Bat-Grey Wolf Optimizer and kernel mapping for automatic incremental clustering  | International Journal of Modeling, Simulation, and Scientific Computing       | ISSN (print): 1793-9623  <br>ISSN (online): 1793-9615 |  | International |
| 36 | Automatic Incremental Clustering Using Bat-Grey Wolf Optimizer-Based MapReduce Framework for Effective Management of High-Dimensional Data | International Journal of Ambient Computing and Intelligence (IJACI)           | ISSN: 1941-6237 EISSN: 1941-6245                      |  | International |
| 37 | Literature review and analysis on big data stream classification techniques  | International Journal of Knowledge-based and Intelligent Engineering Systems, | ISSN: 1327-2314 (P) and ISSN 1875-8827(E)             |  | International |

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|----|---|--|------------------|--|---------------|
| 38 | Prediction of Mechanical Properties of Metal through Machine Learning | International Journal of Advanced Trends in Computer Science and Engineering | E-ISSN:2278-3091 |  | International |
|----|---|--|------------------|--|---------------|

|    | Approach   |  |   |       |               |
|----|--|--|---|-------|---------------|
| 39 | Care-giver alerting for bedridden patients using hand gesture recognition system                 | Journal of Physics: Conference Series 1921 (2021) 012077 IOP Publishing<br>doi:10.1088/1742-6596/1921/1/012077 | 1921 (2021)<br>012077                               |       | International |
| 40 | From Blackbox to Explainable AI in Healthcare: Existing Tools and Case Studies"                  | Mobile Information Systems, vol. 2022  | ISSN: 1574-017X (Print)<br>ISSN: 1875-905X (Online) | 1.863 | International |
| 41 | A case study for performance analysis of big data stream classification using spark architecture | International Journal of System Assurance Engineering and Management   | ISSN: 09764348,<br>09756809                         | 2     | International |

|    |  |   |   |       |               |
|----|--|---|---|-------|---------------|
| 42 | “Conditional random field recurrent neural network segmentation with optimized deep learning for brain tumour classification using magnetic resonance imaging” | The Imaging Science Journal   | ISSN: 1368-2199                         | 0.871 | International |
| 43 | “Theoretical Analysis and Comparative Study of Top 10 Optimization Algorithms with DMS Algorithm”  | Intelligent Decision Technologies   | ISSN 1872-4981 (P) ISSN 1875-8843 (E)   | 0.7   | International |
| 44 | Machine Learning Framework for Stageswise Classification of Alzheimer’s Disease”   | International Conference on Cognitive and Intelligent Computing. Cognitive Science and Technology | ISBN978-981-19-2358-6, pp 285–296       |       | International |
| 45 | Hybrid deep WaveNet-LSTM architecture for crop yield prediction”   | Multimed Tools Appl (2023)  | ISSN 1573-7721 (Online), ISSN 1380-7501 |       | International |

|    |   |   |  |  |               |
|----|---|---|--|--|---------------|
| 46 | “ An incremental clustering using bat-spotted hyena optimiser with spark framework ”                      | International Journal of Intelligent Information and Database Systems, 2023                           | ISSN online: 1751-5866 ; ISSN print: 1751-5858 |  | International |
| 47 | “Detection of Suspicious Human Activities from Surveillance Camera using neural networks”                 | International Conference on Frontiers Of Intelligent Computing: Theory And Applications (FICTA 2023), |  |  | International |
| 48 | “Comparative Analysis of CNN Models for Tilapia Freshness Detection”                                      | CCIS Series of Springer   |  |  | International |
| 49 | “ Big Data Stream Classification in Apache Spark Platform using Adaptive Dragonfly Moth Search Algorithm” | Int. J. of Industrial and Systems Engineering   |  |  | International |
| 50 | “Study on Deep Learning Techniques for Finding Suspicious Violence Detection in a Video Surveillance”     | International Journal on Recent and Innovation Trends in Computing and Communication                  | ISSN: 2321-8169                                |  | International |

5.8. Papers presented at National / International Conferences:

| S.No | Title of the Paper          | Names of the Conference/ Seminars | National/ International | Period |
|------|-----------------------------|-----------------------------------|-------------------------|--------|
| 1    | Web Usage Mining – A Survey | IEEE International                | International           |        |

|   |   |  |               |        |
|---|---|--|---------------|--------|
|   |   | Advance Computing Conference (IACC 2009) Patiala, India  |               | Days   |
| 2 | Polyanalyst-Spatial Data mining Tool For Polio Cases Analysis               | International Conference on Health GIS, Association of Geo Informatics, 205 Organizer Association of Geoinformation Technology (AgIT), Pathumthani, Thailand | International | 2 Days |
| 3 | Feature based facial expression recognition from image sequences using SVMs | International Conference on Research Advancements in Computer Science and Communication Dec 2016   | International | 2 Days |
| 4 | Data Clustering Using Adaptive Differential Evolution                       | Advanced Computing Methodologies 2013” ICACM under Teqip II  | International | 2 Days |

|   |   |   |               |        |
|---|---|---|---------------|--------|
| 5 | Text Document Clustering with an improved K Modes Approach                          | Modern Trends in Computer Science and Technology” in Association with CSI             | International | 2Days  |
| 6 | Text Document Clustering with a Variant Partitional Approach                        | Advanced Computing and Pattern Recognition” ACP R 14 in Association with CSI and ISTE | International | 2Days  |
| 7 | A Variant Agglomerative Approach for Text Document Clustering                       | Modern Trends in Computer Science and Technology” in Association with CSI             | National      | 2 Days |
| 8 | Analysis of Soft Computing Techniques to Forecast Mechanical Attributes of an Alloy | International Conference on Recent Trends in Machine Learning, IOT, Smart Cities &    | International | 2Days  |

|    |  |  |               |       |
|----|--|--|---------------|-------|
|    |  | Applications   |               |       |
| 9  | Smart Attendance System Using Speech Recognition             | ” 4th International Conference on Smart Systems and Inventive Technology (ICSSIT 20-22 Jan. 2022 | International | 2Days |
| 10 | Machine Learning Based Disease Classification and Prediction | International Conference Knowledge Engineering and Artificial Intelligence (ICKEAI-2024)         | International | 2Days |

|    |   |  |               |       |
|----|---|--|---------------|-------|
| 11 | “ Enhancing Multi-Access Edge Computing Efficiency through Communal Network Selection ” | International Conference Knowledge Engineering and Artificial Intelligence (ICKEAI-2024) | International | 2Days |
|----|---|--|---------------|-------|

#### 5.9. Sponsored research Projects: NIL

| S.No | Title  | Agency | Period    | Grant amount | Ongoing / Completed |
|------|--|--------|-----------|--------------|---------------------|
| 1.   | Development of a tool to predict mechanical properties of steel by exploring data science techniques | AICTE  | 2017-2020 | Rs.427176/-  | Completed           |

#### 5.10 Consultancy Projects:

| S.No | Title                | Agency              | Period    | Ongoing / Completed |
|------|----------------------|---------------------|-----------|---------------------|
| 1    | Apps World HR Module | Ziraff Technologies | 9 Months  | Completed           |
| 2    | Condo App            | Ziraff Technologies | 12 Months | Completed           |
| 3    | Wise Methods         | Ziraff Technologies | 14 Months | Completed           |

## **6. Awards / Honors received:**

- Java Standard Edition 6 Programmer Certified Professional Exam
- Java Enterprise Edition 5 Web Component Developer Certified Professional Exam
- Oracle Database SQL Certified Expert
- Oracle PL/ SQL Developer Certified Associate
- R Programming Certification
- Best Paper Award in the National Conference on “Modern Trends in Computer Science and Technology” 2013
- Conferred an “Award of Excellence” sponsored by SAP India Pvt. Ltd. in four week AICTE approved FDP on “Use of ICT in education for online and blended learning” by IIT Bombay under the National Mission on education through ICT (MHRD) May 2nd-July 10th, 2016.
- Felicitated and appreciated at Mallareddy Engineering College for Women as part of Women’s Day Celebration

Member of Professional Societies:

- Life member - Indian Society for Technical Education (ISTE) – LM 93052
- Life member – Computer Society of India (CSI)
- IEEE Member

**7. Motto:** Teach to contribute to build a better Society and Nation.