



GOVERNMENT COLLEGE OF ENGINEERING AURANGABAD CHHATRAPATI SHAMBHAJI NAGAR



2025

College Research Directory

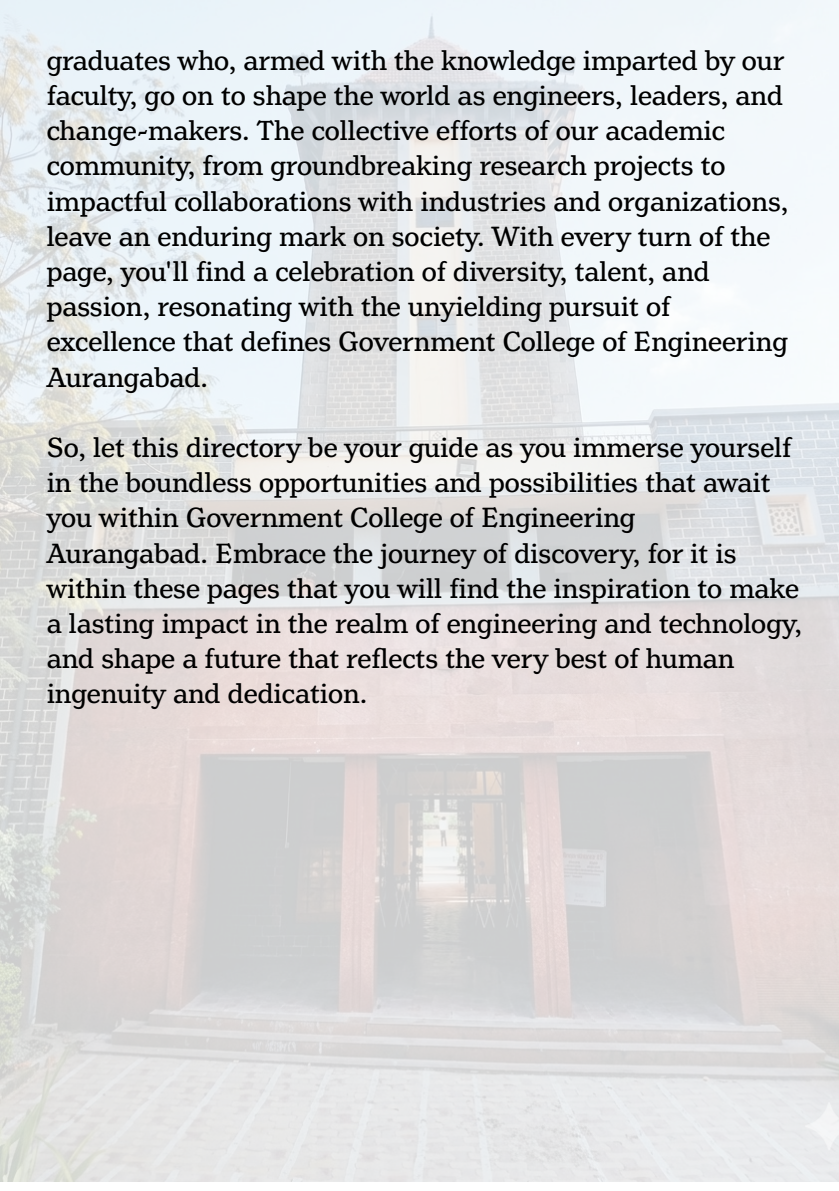
About the Book - College Research Competence

Within these pages, you will embark on a captivating journey of exploration, delving deep into the realm of knowledge and uncovering the collective wisdom of our distinguished faculty members. Beyond their roles as dedicated educators, our professors stand as beacons of inspiration, trailblazing researchers, and industry experts, shaping the forefront of their respective fields.

This directory proudly compiles the Intellectual Property Rights (IPRs) amassed by our faculty members, underscoring their innovative contributions to various fields. These patents and copyrights exemplify the intellectual vigor of our academic community and its dedication to translating ideas into tangible solutions for real-world challenges.

As you traverse these pages, you will gain a profound insight into the multifaceted expertise of our faculty members. From sustainable infrastructure development to advanced robotics, from renewable energy solutions to artificial intelligence and cybersecurity, our professors' diverse areas of expertise reflect the dynamic and ever-evolving nature of engineering and technology. Their knowledge is the bedrock upon which our college's strength and reputation are built.

This directory symbolizes more than just a list of names and credentials; it embodies the spirit of a nurturing academic environment. Here, inquisitive minds are cultivated, creativity thrives, and innovation finds fertile ground to blossom. Our unwavering commitment to excellence is mirrored in the accomplishments of our



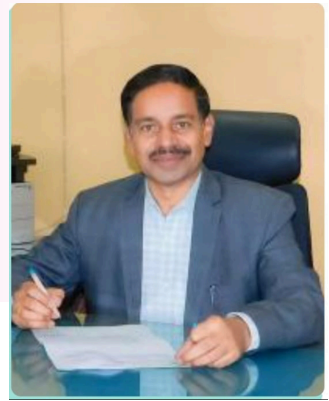
graduates who, armed with the knowledge imparted by our faculty, go on to shape the world as engineers, leaders, and change-makers. The collective efforts of our academic community, from groundbreaking research projects to impactful collaborations with industries and organizations, leave an enduring mark on society. With every turn of the page, you'll find a celebration of diversity, talent, and passion, resonating with the unyielding pursuit of excellence that defines Government College of Engineering Aurangabad.

So, let this directory be your guide as you immerse yourself in the boundless opportunities and possibilities that await you within Government College of Engineering Aurangabad. Embrace the journey of discovery, for it is within these pages that you will find the inspiration to make a lasting impact in the realm of engineering and technology, and shape a future that reflects the very best of human ingenuity and dedication.

Principal Desk

Dear Readers,

It is with immense pleasure and pride that I welcome you to the college department's book, a testament to the remarkable journey of research and academic excellence at our esteemed institution. This publication serves as a window into the thriving world of academia, where knowledge is not just imparted but actively created and disseminated.



At our college, research is not just a pursuit; it is a way of life. We boast five distinguished research centers under the aegis of BAMU (Dr. Babasaheb Ambedkar Marathwada University) Civil, Mechanical, Electrical, ENTC (Electronics and Telecommunication), and CSE (Computer Science and Engineering). These centers serve as the fertile grounds where ideas are sown, nurtured, and eventually flourish into groundbreaking research.

Our commitment to academic excellence has been recognized at the highest levels. We are a proud QIP Ph.D. center, demonstrating our dedication to fostering the next generation of researchers. Additionally, we are honored to be recognized as a center for the ADF (AICTE Doctor's Fellowship) program, further exemplifying our commitment to advancing knowledge and innovation.

With over 130 completed and ongoing Ph.D. projects undertaken by our talented candidates, we have been at the forefront of innovative research. These projects are a testament to our students and faculty's dedication, perseverance, and passion for knowledge. Behind every successful research project, there is a mentor who guides and inspires. We are proud to have 15+ dedicated research supervisors (Ph.D. Guides) who have played a pivotal role in nurturing research talent and shaping the future of our scholars.

Our institution is not just about academics but also about holistic development. The vibrant Institutional Council, established since 2018-2019, has orchestrated 35+ enriching activities, making learning a truly immersive experience. We strongly believe in the power of collaboration. Our institution actively fosters research collaborations and has forged leagues of partnerships with research projects, bringing together academia and industry to create impactful solutions. In pursuit of global excellence, we have undertaken the TEQIP-3 project, supported by the World Bank. This project has been instrumental in elevating the standards of education, research, and infrastructure at our institution, further solidifying our commitment to excellence.

In conclusion, this departmental book is a testimony to our unwavering dedication to the pursuit of knowledge, innovation, and academic excellence. It reflects the tireless efforts of our faculty, staff, and students who continue to raise the bar and set new standards in the field of education and research.

As we move forward, we invite you to explore the pages of this book, filled with the stories of academic achievement, research breakthroughs, and the spirit of innovation that defines our institution.

Together, we look forward to a future brimming with possibilities and endless horizons of discovery.

Warm regards,

Dr. S.S.Dambhare

Principal

A photograph of a multi-story building with a light-colored facade and a balcony with a metal railing. Large trees with green leaves are in the foreground, partially obscuring the building. The text 'CIVIL' is overlaid in a large, white, serif font, and 'Department' is overlaid in a smaller, white, sans-serif font below it.

CIVIL

Department



Dr. Shubhada Koranne.

Ph.D. (Civil Engineering)

Ph.D. Project: Utilization of Steel Slag in
the Roads of Marathwada Region

Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 21 | |
| <i>Citations</i> | 131 | 36 |
| <i>H Index</i> | 4 | 3 |
| <i>I 10 Index</i> | 3 | |

Publication in last five years:

1. Thombare T. P. and Koranne S. S., "Stabilization of black cotton soil by using Steel slag powder", International research journal of Engineering and technology (IRGET), Volume 05 Issue:09 Sept 2018, e- ISSN:2395-0056, p- ISSN:2395-0072
2. Sujit M. Vajjwade and Dr. Shubhada S. Koranne, "A review paper on stabilization of subgrade using bitumen, Steel slag and geogrid", international journal of innovative research in Science Engineering and technology, Vol.8 Issue 2, February 2019
3. Mahesh S. Hudekar and Dr. Shubhada S. Koranne, "To overcome lateral Earth pressure on buried cast pipe using geofabric", 6th international conference on multidisciplinary research (ICMR -2019), Osmania University campus, Hyderabad (India), 30th-31st May 2019
4. Ms Radhika Borkar and Dr. Shubhada S. Koranne, "Parametric study on geogrid reinforced retaining wall system", International Journal of Engineering Applied Sciences and Technology, 2019, Vol.4, Issue 3, ISSN No.2455-2143, pages. 332-337

A large industrial workshop with a high, vaulted metal roof and rows of green machinery. The scene is dimly lit, with light coming from skylights in the roof. The machinery is arranged in long rows, and the floor is concrete. The overall atmosphere is industrial and functional.

Mechanical

Department



Dr. Umakant N.Shete

Ph.D. (Mechanical)

Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> |
|---|-----------------------|
| <i>Number of Publications till date</i> | 3 |
| <i>Citations</i> | 3 |
| <i>H Index</i> | 1 |
| <i>I 10 Index</i> | 0 |

Publication in last five years:

1. U. N. Shete, R. Kumar, and R. Chandra, "Pool boiling heat transfer enhancement of R134a, R32, and R600a using reentrant cavity surfaces," *Exp. Heat Transf.*, pp. 1–20, 2022, doi: 0.1080/08916152.2022.2055226.
2. U.N. Shete, R. Kumar, and R. Chandra, "Heat transfer Enhancement for the Boiling of Quasi-azeotropic Refrigerant mixture on the Re-entrant Cavity Surfaces," *J. Enhanc. Heat Transf.*, vol. 29, no. 7, pp. 73–90, 2022, doi: 10.1615/jenhheattransf.2022043550.
3. Umakant N.Shete, Ravi Kumar and Ramesh Chandra(2023),Pool Boiling Heat Transfer in Saturated R-407C Using Reentrant Cavity Surfaces, *Heat Transfer Engineering*, DOI:1-.1080/01457632.2023.2185489.



Dr. Shyam Arun Sonawane

Ph.D. (Mechanical Engineering)

Ph.D. Thesis: Minimization of Wear of
Cryogenically Treated M2 and M35 Tool
Steel

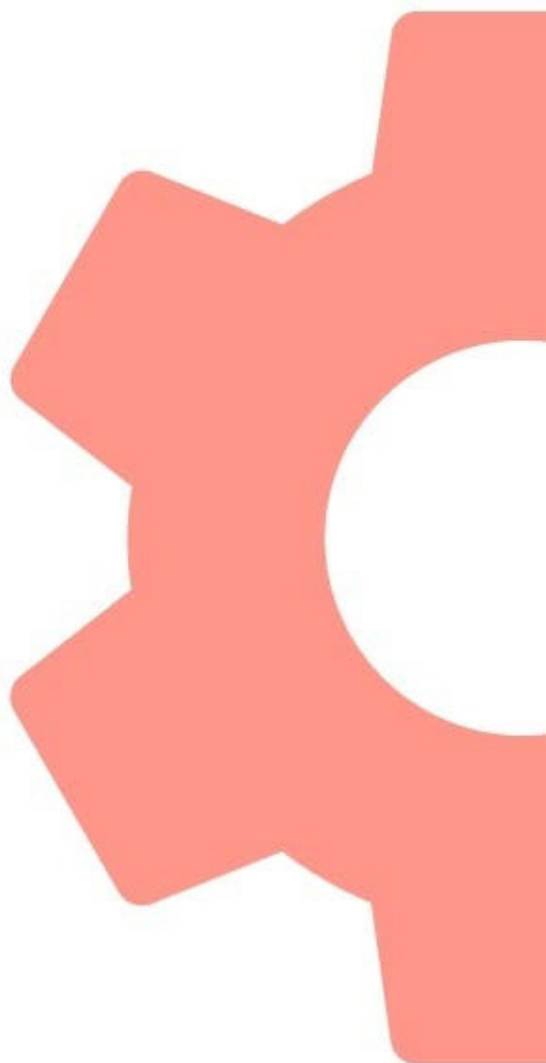
Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | |
|---|-----------------------|--|
| <i>Number of Publications till date</i> | 10 | |
| <i>Citations</i> | 31 | |
| <i>H Index</i> | 3 | |
| <i>I 10 Index</i> | 0 | |

Publication in last five years:

1. Pratik K. Satav, Shyam A. Sonawane, "Review on Data Acquisition and Monitoring of CNC machine Tools using Smart Manufacturing Tools", National Conference on Energy and Environment for Sustainable Development organized by Government College of Engineering & Research, Avasari (Kh), 05th – 06th Jul 2022, pp. 104-108.
2. Dhanshri R. Lahore, Shyam A. Sonawane, "A Review paper on Analysis and Development of Real Time Simulation of End Milling Cutter to Avoid Tool Breakdown", National Conference on Energy and Environment for Sustainable Development organized by Government College of Engineering & Research, Avasari (Kh), 05th – 06th Jul 2022, pp. 150-155.
3. Yasin Sayyed, Nayan Patil, Kiran Mhetre, Saurabh Kale, Bhargav Patil, Shyam Sonawane, "Design and Optimization of FSAE Wheel Assembly Using Finite Elemental Analysis", International Journal of Scientific Development and Research, ISSN: 2455-2631, Vol. 8, Issue 06, pp. 422-427, June 2023

4. Yasin Sayyed, Nayan Patil, Shoyab Sayyad, Bhargav Patil, Shridhar Nandiwale, Shyam Sonawane, "Design and Development of Multipurpose Land Rover", 2nd International Conference on Vision Towards Emerging Trends in Communication and Networking Technologies (ViTECoN), Vellore, India, 2023, pp. 1-6, IEEEXplore, doi: 10.1109/ViTECoN58111.2023.10157748.





Dr. Aniruddha Nikalje

Ph.D. (Mechanical Engineering)

Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 17 | 04 |
| <i>Citations</i> | 141 | 72 |
| <i>H Index</i> | 04 | 04 |
| <i>I 10 Index</i> | 01 | |

Publication in last five years:

1. DV Lohar, AM Nikalje, PG Damle, "Development and testing of hybrid green polymer composite (HGPC) filaments of PLA reinforced with waste bio fillers", Materials Today: Proceedings 62, 818-824, 2022
2. DV Lohar, AM Nikalje, PG Damle, "Synthesis and characterization of PLA hybrid composites using bio waste fillers" Materials Today: Proceedings 72, 2155-2162, 2023
3. PR Vishwasrao, AM Nikalje, "Optimization of Process Parameter in Wire Electrical Discharge Machining of H11 Tool Steel Using Response Surface Methodology" Int. J. Res. Appl. Sci. Eng. Technol 9 (12), 2150-2157, 2020
4. SS Chaudhari, AM Nikalje, GE Chaudhari, "Current research in powder mixed electric discharge machining: a review", IOP Conference Series: Materials Science and Engineering 810 (1), 012009, 2020

5. DV Lohar, PG Damle, AM Nikalje, "A Review of Hybrid polymer Bio-composites", IOP Conference Series: Materials Science and Engineering 810 (1), 012001, 2020
6. RD Dandagwhal, AM Nikalje, ER Deore, "Effect of process parameters on additively manufactured parts using FDM process & material selection: A review", IOP Conference Series: Materials Science and Engineering 810 (1), 012031, 2020
7. DV Lohar, AM Nikalje, PG Damle, "Novel Hybrid Bio Composite PLA Filaments Reinforced with Bio Fillers for 3D Printing", Technology Innovation in Mechanical Engineering: Select Proceedings of TIME, 2022
8. DV Lohar, AM Nikalje, PG Damle, "Novel Hybrid Bio Composites of PLA with Waste Bio Fillers", Recent Advances in Manufacturing Processes and Systems: Select Proceedings of RAM, Springer Nature Singapore, 2022
9. Sandip Inje, MS Harne, AM Nikalje, Pawan Somavanshi, "Parametric Optimization of Wear Test on Al6082/ZrSi Using Taguchi Method", International Journal of Research in Engineering, Science and Management, Volume-3, Issue-2, February-2020
10. N Bhosale, AM Nikalje, "Optimization of Wire Cut Electro Discharge Machining Process Parameters for HCHCr-D3 Steel by using Taguchi", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429, Volume 8 Issue XI Nov 2020



Dr. Shailesh D Ambekar

Ph.D. (Mechanical Engineering)

Ph.D. project: Design optimization of FRT Hybrid Nano composite for Maximizing Flexural Strength and minimizing wear rate
Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 26 | 04 |
| <i>Citations</i> | 83 | 14 |
| <i>H Index</i> | 5 | 2 |
| <i>I 10 Index</i> | 2 | |

Publication in last five years:

1. Dynamic Effect Analysis And Flexural Storage Modulus Optimization Of CFRP Hybrid Nano Composites Using RSM, Shailesh D. Ambekar, Vipin Kumar Tripathi, Huynh Tan Hoi, VOLUME 9, ISSUE 08, AUGUST 2020.
2. Investigation of the Effect of Nano Particles on Visco-elastic Behaviour of CFRP Hybrid Nanocomposites, Shailesh D. Ambekar* , Vipin K. Tripathi, ISSN 0976 – 6693.
3. The Multi-objective Optimization Design Approach for Carbon Fiber Hybrid Nano composites Containing NanoClay and NanoZnO Particles by Using OptiComp, SD Ambekar, VK Tripathi, Journal of Bio-and Tribo-Corrosion 6 (3), 1-15
4. Wear Behaviour of Cryogenic Treated M2 Tool Steel under Dry Sliding Condition, S A Sonawane, V K Tripathi, S D Ambekar, Applied Mechanics and Materials 798, 395-401

5. Influence of Process Parameters on Depth of Penetration In GMAW Process by Using Taguchi Method, SD Ambekar, S R Wadhokar, International Journal of Science and Research 4 (5)
6. Optimization of flexural strength of CFRP hybrid nano composites containing nanoZnO and nanoclay particles, Shailesh D. Ambekar, Vipin Kumar Tripathi, Huynh Tan Hoi, ISSN 2277-8616, VOLUME 9, ISSUE 08, AUGUST 2020.
7. Ambekar. S D," Experimental Analysis of Material Removal Rate in Drilling of 41Cr4 by a Taguchi's Approach, S S Ahmed, Journal of Engineering Research and Applications 5 (5), 28-33
8. A review on optimization of cutting parameter for surface roughness, material removal rate and machining time of aluminium LM-26 alloy, H R Ghan, S D Ambekar, Int. J. Res. Aeronaut. Mech. Eng 2 (2), 23-28
9. Parametric Optimization of Gas metal arc welding process by using Taguchi method on stainless steel AISI 410, PROF. S. D. AMBEKAR, SUNIL R.WADHOKAR, Vol. 3, Issue: 1, January : 2015 (IJRMEET) ISSN: 2320-6586.
10. Optimization of cutting parameter for Surface Roughness, Material Removal rate and Machining Time of Aluminium LM-26 Alloy, H. R. Ghan, S.D.Ambekar, Volume 3, Issue 2, March 2014, ISSN: 2319-5967
11. Optimization and analysis of wear rate of CFRP-nanoZnO/nanoclay hybrid composites using RSM, VK Tripathi, S Ambekar, Journal of Bio-and Tribo-Corrosion 5 (4), 1-13
12. A review on influence of nano particles on the wear behaviour of epoxy resin powder coatings Vishal Arke, U. V. Hambire and S. D. Ambekar, Advances and Applications in Mathematical Sciences Volume 21, Issue 9, July 2022, Pages 4991-4997 © 2022 Mili Publications, India
13. Design and cfd simulation of savonius type vertical axis airstream rotor in ansys fluent onkar dhakne, dr. Shailesh ambekar,dogo rangsang research journal ugc care group i journal issn : 2347-7180 vol-13, issue-1, no. 3, january 2023
14. Multi-objective optimization and manufacturing of low-cost vertical axis wind turbine rotor for national highway in india for power generation, Onkar Dhakne, Dr. Shailesh Ambekar, Dogo Rangsang Research Journal UGC Care Group I Journal ,ISSN : 2347-7180 Vol-13, Issue-5, No.5.



Dr. Umesh Hambire

Ph.D. (Mechanical Engineering)

Ph.D. project: Bio Materials

Assistant Professor

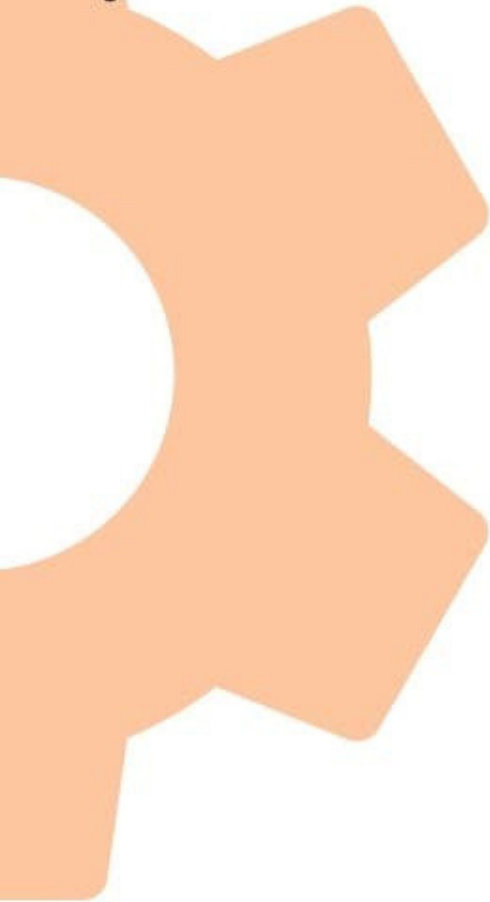
| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 42 | 10 |
| <i>Citations</i> | 222 | 82 |
| <i>H Index</i> | 09 | 04 |
| <i>I 10 Index</i> | 07 | |

Publication in last five years:

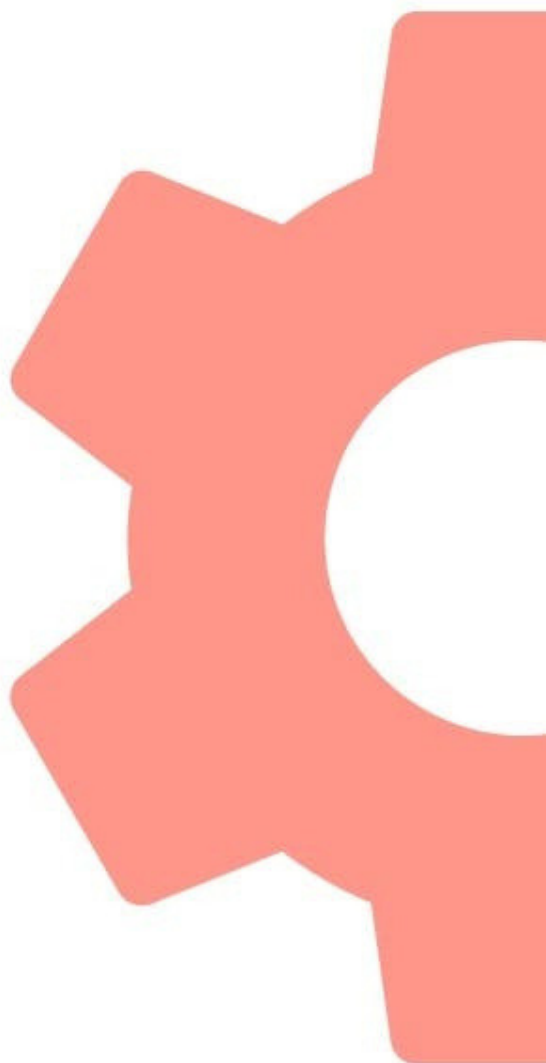
1. Dr U.V.Hambire, Experimental investigation of EDM process parameters on surface roughness using copper brass and graphite electrode, International Research Journal of Engineering and Technology Volume 05 Issue 4 page no 1474 to 1477
2. Dr U.V.Hambire, structural analysis of molar tooth restored with different dental restorative materials by using fea method International Journal of Research and Analytical Reviews Volume 6 Issue 2 page no 819 to 823
3. Dr U.V.Hambire, experimental investigation of wear properties of al 6082 metal matrix composite reinforced with titanium carbide particulate international conference on precision, meso micro and nano engineering volume 9 issue 1 page no 58 to 64
4. Dr U.V.Hambire, a review of development and application of solar photovoltaic powered refrigeration system. international journal of energy and power engineering, International conference on energy and environmental technologies for sustainable development volume 10 issue no 3 page 57 to 61

5. Dr U.V.Hambire, influence of zirconia based dental composite on abrasive wear,ARPN Journal of Engineering and Applied Sciences volume 12 issue 10 page no1166 to 1169
6. Dr U.V.Hambire, optimisation of flexural strength in zirconia nanoclusters of the bis-gma and tegdma based dental composites IOP Conference Series Materials Science and Engineering Volume 810
7. Dr U.V.Hambire, experimental analysis of effect of hydroxyapatite nanoparticles on wear properties and micro hardness of dental composites International Journal for Scientific Research and Development Volume 8 Issue 9 page no 52 to 54
8. Dr U.V.Hambire, Oral Health Care and Treatment Needs in Postmenopausal Women,Journal of Oral Health and Community Dentistry Volume 15 Issue 1 page 24 to 29
9. Dr U.V.Hambire, a review on evaluation of mig welding process parameter by using mooras method, International Journal for Research in Applied Science & Engineering ,Volume 9 Issue 12 page no 1649 to 1653
10. Dr U.V.Hambire, effect of hydroxyapatite nanoparticles on compressive strength and flexural strength of dental composites using taguchi method
11. International Journal for Research in Applied Science and Engineering Technology Volume 10 Issue 1,page no 106 to 113,Dr U.V.Hambire, A review on influence of nano particles on the wear behaviour of epoxy resin powder coatings,Advances and Applications in Mathematical Sciences Volume 21 Issue 9 page no 4991 to 4997
12. Dr U.V.Hambire, A review on surface modification of ti-6al,4vtc4 grade 5 ti alloy used in orthopaedic Implants Advances and Applications in Mathematical Sciences Volume 21 Issue 9 page no 5373 to 5383
13. Dr U.V.Hambire, medicago sativa a potential remineralising agentIndian journal of dental Education,Volume 15 Issue 3 Page No 89 to 92

14. Dr U.V.Hambire, optimisation of compressive strength in zirconia nanoclusters of the bis-gma and tegdma based dental composites Arpn journal of engineering and applied sciences volume 7 issue 9 Page no 1139 to 1145
15. Dr U.V.Hambire, comparison of mechanical properties of resin-based dental composites with different filler types
16. Journal of Materials & Metallurgical Engineering Volume 2 Issue 1 Page no1 to 8



4. Yasin Sayyed, Nayan Patil, Shoyab Sayyad, Bhargav Patil, Shridhar Nandiwale, Shyam Sonawane, "Design and Development of Multipurpose Land Rover", 2nd International Conference on Vision Towards Emerging Trends in Communication and Networking Technologies (ViTECoN), Vellore, India, 2023, pp. 1-6, IEEEXplore, doi: 10.1109/ViTECoN58111.2023.10157748.





Electrical

Department



Dr. Sunanda Ghanegaonkar

Ph.D. (Electrical Engineering)

Thesis- Analysis of Radial Distribution Systems with Dispersed Generation

| <i>Credentials</i> | <i>Google Scholar</i> |
|---|-----------------------|
| <i>Number of Publications till date</i> | 12 |
| <i>Citations</i> | 33 |
| <i>H Index</i> | 2 |
| <i>I 10 Index</i> | 2 |

Publication in last six years:

1. Optimal Hourly Scheduling of Distributed Generation and Capacitors for Minimization of Energy Loss and Reduction in Capacitors Switching Operations, IET Generation, Transmission and Distribution, 2017, Vol. 11 Iss. 9, pp. 2244-2250 (International Journal)
2. Design of Power System Stabilizer as Second-Order Sliding Mode Controller. CISCON- National Conference on CONTROL INSTRUMENTATION SYSTEMS CISCON 2020 (Lecture Notes in Electrical Engineering book series (LNEE, volume 750)) First Online: 11 May 2021
3. Design of Power System Stabilizer as Second-Order Sliding Mode Controller, Smart Sensors Measurements and Instrumentation: Select Proceedings of CISCON 2020 295-305 295-305

Dr. Sandhya Kulkarni
Government College of
Engineering, Aurangabad,
Chhatrapati Sambhajnagar
Electrical Engineering Department



Designation: Associate Professor
Education: Ph.D. (Electrical
Engineering)
Ph.D. Project: Fault Tolerant Control
of Permanent Magnet Synchronous
Machines

| Sr No. | Name of Student | Guide/Co-guide | Topic of Research |
|--------|---------------------|----------------|--|
| 1 | Archana D. Wankhade | Guide | Development of Secure Framework for Cloud Based IoT Network Attack Detection and Mitigation Using Machine Learning Approach |
| 2 | Dilip R. Uike | Guide | Design and Development of Deep Learning – Based Framework for Cardiac Disease Diagnosis |
| 3 | Prajakta P. Shelke | Guide | Development of a Framework for Sarcasm and Emotion Recognition Using Deep Learning Approaches for Multilingual Code–Mixed Data |
| 4 | Swati P. Meshram | Guide | Design of Pattern Mining Algorithms for Clustering and Co-Location in Spatio–temporal Data |

Publications in Last Five Years: International Journals

- Mrs. S. S. Kulkarni and Dr. A. G. Thosar, "Mathematical Modeling and Simulation of Permanent Magnet Synchronous Machine", International Journal of Electronics and Electrical, ISSN 2301-380X Vol. No2, 2013, DOI:10.12720/IJEEE.1.2.66-71, Corpus ID: 18722733, Impact factor 1.01.
- Mrs. S. S. Kulkarni and Dr. A. G. Thosar, "Direct Torque Controlled Fault Tolerant Controller for Permanent Magnet Synchronous Motor", Scopus indexed, International Journal of Electrical Engineering and Technology (IJEET) Volume 12, Issue 9, September 2021, pp. 132-144.
- Mrs. S. S. Kulkarni and Dr. A. G. Thosar, "Performance Analysis of Permanent Magnet Synchronous Machine due to Winding Failures", International Journal of Electrical & Electronics Research (IJEER), ISSN: 2347-470X Volume: 9, Issue 3, January 2022, Scopus indexed

- P. Tamboli, Mrs. S. S. Kulkarni, Dr. A. G. Thosar, "A Review: Role of Energy Efficiency in Industrial Management", 2020 IJCRT | Volume 8, Issue 6 June 2020 | ISSN: 2320-2882.
- P. Indurkar, Mrs. S. S. Kulkarni, Dr. A. G. Thosar, "Review on Solar Water Pumping System Employing PMSM", Published In IJCRT, 7.97 Impact Factor, Volume 8 Issue 6, June 2020.
- R. A. Punjabi, Mrs. S. S. Kulkarni, Dr. A. G. Thosar, "Analysis of Inter-turn Fault in Stator Winding of PMSM Motor", International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) Volume 10, Issue 1, January 2021, Impact Factor: 7.512.
- P. Indurkar, Mrs. S. S. Kulkarni, Dr. A. G. Thosar, "Comparative Analysis of PMSM and IM for Solar Water Pumping System", International Journal of Engineering Research and Applications, ISSN: 2248-9622, Vol. 11, Issue 2, February 2021, pp. 12-15.
- Yogita Sakhare, Mrs. S. S. Kulkarni, "Performance Evaluation of IM and PMSM with Multilevel Inverter for Electric Vehicle Application", e-ISSN: 2278-8875, IJAREEIE Volume 11, Issue 6, June 2022.
- Gajanan Wagh, Mrs. S. S. Kulkarni, "Drive of Senseless Switched Reluctance Motor (SRM) Depending on Artificial Neural Networks", IJRAR January 2022, Volume 9, Issue 1.
- Rohit Andore, Dr. S. S. Kulkarni, Dr. A. G. Thosar, "Energy Meter and Power Theft Monitoring", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Volume 12, Issue 2, February 2023.
- Sabura Sadaf Barkatullah Khan, Dr. S. S. Kulkarni, "A Review on Power Factor Correction using An Active Boost Type Converter", JETIR December 2023, Volume 10, Issue 12.
- Roshan Jadhav et al., "Solar Energy Based EV Charging Station with An Added Battery Storage System", Journal of Emerging Technologies and Innovative Research (JETIR) May 2024, Volume 11, Issue 5.
- Pallavi Pandit, Dr. S. S. Kulkarni, "BUCK-BOOST CONVERTER APPLICATION", Published In JETIR, September 2024.
- Pallavi Pandit, Dr. S. S. Kulkarni, "Efficient Energy Management in DC Nanogrids: A Dual-Buck-Boost Converter Approach using MATLAB Simulation", IJIRSET, Volume 13, Issue 8, August 2024.

- Dr. Sandhya Kulkarni, Aniket Lakhe, Mayuri Rajput, "Artificial Intelligence-Based Technique for Fault Detection and Diagnosis of PMSM Motor", International Research Journal of Engineering and Technology (IRJET), Volume: 12, Issue: 06, June 2025.
- Dr. Sandhya Kulkarni et al., "Simulation-Based Performance Evaluation of PID and Neural Network Controllers for DC Motor Speed Regulation", IRJET, Volume 12, Issue 05, May 2025.
- Ruchita Rangari, Dr. S. S. Kulkarni, "A comparative analysis of centralized and distributed MPPT-based inverter systems for grid-connected PV applications", IJIRT, June 2025, Volume 12, Issue 1.
- Mrs. S. S. Kulkarni and Dr. A. G. Thosar, "State of Art of Fault Tolerant Control of Induction Motors", International conference at GECA, December 2010.
- P. Tamboli, Mrs. S. S. Kulkarni, Dr. A. G. Thosar, "Energy Efficiency in Manufacturing Industry and analysis of Industrial Motors", 4th IEEE International Conference RVS Technical campus Coimbatore, Nov 2020.
- Rohit Andore, Dr. S. S. Kulkarni, Dr. A. G. Thosar, "Energy Meter and Power Theft Monitoring System", 2023 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS).
- Ruchita Padmakar Rangari, Dr. Sandhya Sudhakar Kulkarni, "Enhanced Design and Regulation of a Parallel Module Integrated PV System Utilizing MPPT and Voltage Source Converter (VSC)", 2025 International Conference on Electronics and Computing, Communication Networking Automation Technologies (ICEC2NT) Pune, India. Sep 3-4, 2025.



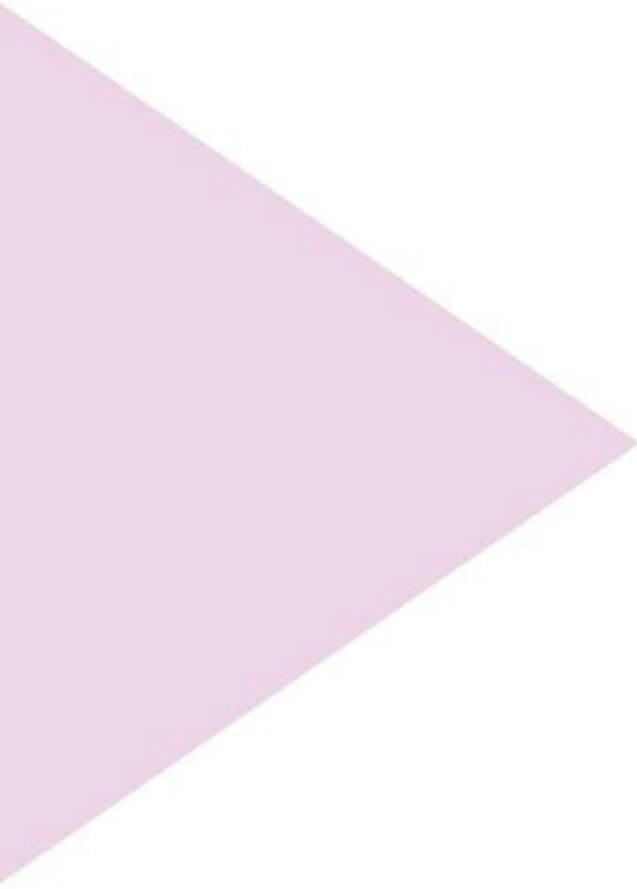
Nitin Phadkule

Ph.D. (Electrical Engineering)
Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> |
|---|-----------------------|
| <i>Number of Publications till date</i> | 35 |
| <i>Citations</i> | 27 |
| <i>H Index</i> | 2 |
| <i>I 10 Index</i> | 1 |

Publication in last five years:

1. P P Wasnik, N J Phadkule, K D Thakur, Fault detection and classification based on semi-supervised machine learning using KNN, 2019 International Conference on Innovative Trends and Advances in Engineering and Technology (ICITAET)
2. P P Wasnik, N J Phadkule, K D Thakur, Fault detection and classification in transmission line by using KNN and DT technique. Res. J. Eng. Techno 7 (4), 335-340, 2020
3. Nasir Quadri, N J Phadkule, Quality enhancement using sepic converter fed induction motor drive, IJRAR, Volume 10 Issue 1 February 2023, Date of Publication: 17-February-2023
4. Rahul Gade, Avantika Pandhare, Shweta Telang, Sonali Rajput, Nitin Phadkule, Effect of distributed generation on protection system in radial distribution network challenges & solutions, International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS), Volume 05, Issue 05, May 2023

5. Manoj Ambhore, Nitin Phadkule, A Review on Voltage Sag Mitigation in Ultra Capacitor Based Dynamic Voltage Restorer (DVR), Publication date 2022/11, International Journal of Advanced Research in Science, Communication and Technology, Volume 2, Issue 1, Pages 254-256, Publisher IJARST
- 



Prof. W. A. Gavhane

M.Tech (Power System)

M.Tech project: PMU placement and state estimation in power system

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 10 | 1 |
| <i>Citations</i> | 1 | |
| <i>H Index</i> | 2 | |
| <i>I 10 Index</i> | 0 | |

Publication in last five years:

1. Walmik A Gavhane and Renuka R Rahane, "Effect of Pa and MB-PSS on Transient Stability of Power System along with SVC Operating in Var Control Mode for a Weakly Damped Power System Operating near stability Limit", International Journal of Emerging Technologies and Innovative Research - JETIR, ISSN 2349-5162, Volume 2, Issue 1, Page 266 to 270, June 2018.
2. Ritisha G. Ankushe, Prof. Walmik Gavhane, "Maximum Power Tracking & Harmonic Reduction on grid PV System Using Different Algorithm Based MPPT Controller", International Journal of Innovative Research in Science Engineering and Technology, ISSN 2347-6710, Volume 11, Issue 1, Page 2551 to 2555, June 2022.
3. Shadab N. Sayyad, Mr. Walmik Gavhane, "DC motor speed control using PI controller", Journal of Emerging Technologies and Innovative Research, ISSN 2349-5162, Volume 9, Issue 9, June 2022.
4. Kulkarni Sayali Sanjayrao, Gavhane Walmik A, "Electric vehicle regenerative braking powered by a BLDC motor", Journal of Engineering Sciences, ISSN 0377-9254, Volume 14, Issue 4, Page 635 to 639, June 2023.

5. Walmik A Gavhane, "Effect of Pa and MB-PSS on Transient Stability of Power System along with SVC Operating in Var Control Mode for a Weakly Damped Power System Operating near stability Limit", International Conference on research trends in engineering Applied Science and Management, Osmania University Centre for International Program, Volume 1, Page 204 to 208, November 2018.
6. Walmik A Gavhane, Renuka R Rahane, "Transient Stability Improvement and Mitigation of Low Frequency Inter-area Oscillations in a Large Power System by using SVC and PSS", International conference ICRIETMR 2018, Bal Krishna Institute of Technology, Kota, Volume 1, Page 12 to 17, December 2018.

A photograph of a computer lab with several students sitting at desks, viewed from behind. The room has large windows with decorative grilles. The text 'ENTC' is overlaid in large white letters, and 'Department' is overlaid in smaller white letters below it.

ENTC

Department



Dr. Sunil Hirekhan

Ph.D. (Electronics Engineering)

Ph.D.Thesis : Effect of Meditation on EEG

Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 27 | 5 |
| <i>Citations</i> | 75 | 32 |
| <i>H Index</i> | 5 | 3 |
| <i>I 10 Index</i> | 2 | |

Publication in last five years:

1. Shruti S. Phutke, Sunil Hirekhan, Prof. Ramchandra Manthalkar, "Meditation: The Science for Better Living", Proc of 5th Bhartiya Vigyan Sammelan, Fergusson College, Pune, May 2017
2. S. R. Hirekhan, Dr. R.R. Manthalkar, "The Detrended Fluctuation Analysis of EEG Signals : A Meditation-based Study", Advances in Intelligent System and Computing, ISSN 2194 5365, Volume 810, Springer nature Pub., Singapore, Jan 2018
3. S. R. Hirekhan, Dr. R.R. Manthalkar, "The Detrended Fluctuation and Cross-Correlation Analysis of EEG Signals", Int.J Intelligent System design and Computing, Inderscience Publishers, Dec 2018
4. S. R. Hirekhan, Dr. R.R. Manthalkar, "LRTC Analysis of Meditation EEG Signals", Sino-US International Conference on Health Sciences and Medical Education (HSME-2019), SMSSI, Wuhan China, Dec 2019

5. Khan Ibtehaj Ali Minhaj Ali, Dr. S.R. Hirekhan, "Fire Fighting Robot using Bluetooth with Wireless Camera", International Journal of Engineering Research & Applications, Vol.2, Issue 1, ISSN 2248-9622, Jan 2021
6. Rajnandini Bhingare, Dr.Sunil Hirekhan, "A survey on Deepfakes Creation and Detection", International Research Journal of Engineering and Technology, Vol. 9, Issue 6, ISSN: 2395 0056, June 2022
7. Prerna V. Katke, Dr.S.R. Hirekhan, "IOT Based Pollution Monitoring and GSM Notification System", International Journal of Scientific Research in Engineering and Management, Vol7, Issue 5, ISSN : 2582-3930, May 2023



Dr. Varsha Ratnaparkhe

Ph.D. (Electronics Engineering)

Ph.D. project: Biomedical Image Analysis

Associate Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 45 | 16 |
| <i>Citations</i> | 268 | 121 |
| <i>H Index</i> | 9 | 6 |
| <i>I 10 Index</i> | 9 | |

IPR:

1.Design of Image of Acquisition Model

Publication in last five years:

1. Prajkta Sadgir, V.R. Ratnaparkhe, "Robust Pre-Processing Module for Leaf Image Analysis", International Journal of engineering & Advanced Technology, ISSN: 2249-8958, Volume -9, Issue-4, pp 2083-2087 April 2020
2. Prajkta Sadgir, V.R. Ratnaparkhe, "Plant Species identification by utilization of Width Plot Analysis Feature Extraction Technique", Research Journal of Chemistry and Environment, Vol 24 (7) July (2020) pp81-85 Res.J.Chem.Enviro July 2020
3. Prajkta Sadgir, V.R. Ratnaparkhe, "Comparison of Classification Algorithms for Identification of Ayurvedic Plant Species", International Journal of Interdisciplinary Innovative Research & Development, ISSN 2456-236X V, Vol.05 Special Issue 01|2020pp.344-349 January 2020
4. Prajkta Sadgir, V.R. Ratnaparkhe, "Robust Pre-Processing Module for Leaf Image Analysis", International Journal of engineering & Advanced Technology, ISSN: 2249-8958, Volume -9, Issue-4, pp 2083-2087 April 2020

5. Sumedha Borde, V.R. Ratnaparkhe, "Optimization in channel selection for EEG signal analysis of Sleep Disorder subjects", Journal of Integrated Science & Technology, IJST 2023, 11(3), 52726-12-2022
6. Sumedha Borde, V.R. Ratnaparkhe, "Cloud Computing Based Smart Healthcare System" CRC Press, Taylor & Francis Group ISBN 978-1-032-06803-9, Cloud Computing Technologies for Smart Agriculture and Healthcare Book, 2022
7. Amol Bodhane V.R. Ratnaparkhe, "Noise removal technique for speech signal in Adaptive Filter using Shadow concept", International journal of Advances in Engineering & Management, ISSN: 2395-5252 IJAEM Vol.4, Issue 11, pp:1236-1241 December 2022
8. Chaitali Jadhav, V.R. Ratnaparkhe, "Fake Video Creation and Detection: A Review", International Research Journal of Engineering and Technology, e-ISSN: 2395-0056 IRJET, Vol 10, Issue 03, pp.635-639 March 2023
9. Sumedha Borde, V.R. Ratnaparkhe, "LSTM based Electro encephalography Analysis for Sleep Disorder , Subjects", International Journal of Applied Pattern Recognition, Inderscience Publishers, _____
10. Vishal Hadolitkar, V.R. Ratnaparkhe, Rajesh Kumar, "Effect of Format Conversion on Source Identification from Audio Recordings: A Study For Forensic Purposes", SN Computer Science, Vol. 5, Article Number 19, Nov 2023
11. Shital B Gundre, Varsha .R. Ratnaparkhe, "Simple and flexible structure of dual band monopole wearable patch antenna", PCEMS 2022, VNIT Nagpur.
12. Shital B Gundre, Varsha .R. Ratnaparkhe, "Simple square shape electromagnetic band gap structure for wearable antenna", PCEMS 2023, VNIT Nagpur.
13. Shital B Gundre, Varsha .R. Ratnaparkhe, "A flexible dual- H shape monopole antenna with dual H shape EBG for WBAN" Journal of Integrated science and technology, January 2025.



Dr. Anil Karwankar

Ph.D. (Electronics Engineering)

Ph.D. project: Devanagari Handwriting
Recognition system

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 40 | 13 |
| <i>Citations</i> | 177 | |
| <i>H Index</i> | 6 | 4 |
| <i>I 10 Index</i> | 5 | |

Publication in last eight years:

1. Anil karwankar,Suhas B. Dhoke, Varsha Ratnaparkhe Estimation Of Hemoglobin Using A I Technique 2017 1st International Conference on Intelligent Systems and Information Management (ICISIM) Date of Conference: 5-6 Oct. 2017 Date Added to IEEE Xplore: 01 December 2017 ISBN Information: INSPEC Accession Number: 17411035 DOI: 10.1109/ICISIM.2017.8122147 Publisher: IEEE
2. Dr. Anil Karwankar, Yogesh Taru,Water Monitoring System Using Arduino with LabVIEW 2017 International Conference on Computing Methodologies and Communication (ICCMC)Date of Conference: 18-19 July 2017 Date Added to IEEE Xplore: 08 February 2018 ISBN Information:INSPEC Accession Number: 17544928 DOI: 10.1109/ICCMC.2017.8282722 Publisher: IEEE
3. Ms. V A Kulkarni, Dr. A R Karwankar Thyroid Disorder Detection And Review Of Existing Thyroid Segmentation Techniques (Page: 939-947) UGC Approved International Journal of Advances Research in Science and Engineering (IJARSE)

4. Ms. V A Kulkarni, Dr. A R Karwankar Thyroid Disorder Detection And Review Of Existing Thyroid Segmentation Techniques IETE Pune Conference - 3rd International Conference on Emerging Trends in Engineering and Management Research (ICETEMR-17) 30 July 2017 Pune
5. Pooja Pakolu Dr. Anil Karwankar Anurag Nigam Design of GaAs MMIC 6-bit Digital Phase Shifter 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2018), MAY 18th & 19th 2018 978-1-5386-2440-1/18/\$31.00 ©2018 IEEE
6. Farooq Azam, Dr. A.R.Karwankar ,Mr. Giridhar Isola Generating Timing and Control Signals for C-Band T/R Module using FPGA 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2018), MAY 18th & 19th 2018 978-1-5386-2440-1/18/\$31.00 ©2018 IEEE
7. Shweta K. Gaikwad ,Dr. Anil R. Karwankar Food Image 3D Reconstruction Using Image Processing Proceedings of the Third International Conference on Trends in Electronics and Informatics (ICOEI 2019) IEEE Xplore Part Number: CFP19J32-ART; ISBN: 978-1-5386-9439-8 978-1-5386-9439- 8/19/\$31.00 ©2019
8. Dr. Anil R. Karwankar, Aishwarya Nalawade Comparison of Methods for Document Restoration and Character Retention and Study of Marathi Character Recognition Processing Proceedings of the Third International Conference on Trends in Electronics and Informatics (ICOEI 2019) DVD Part Number: CFP19J32-DVD; ISBN: 978-1-5386-9438-1 978-1-5386-9439- 8/19/\$31.00 ©2019 IEEE



Dr. Sangita D. Bharkad

Ph.D. (Electronics Engineering)

Ph.D. Project: Secure Biometric System using
Fingerprint

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 37 | 21 |
| <i>Citations</i> | 257 | 170 |
| <i>H Index</i> | 9 | 7 |
| <i>I 10 Index</i> | 9 | |

Publication in last five years:

1. Bharkad S., Automatic Segmentation of Exudates in Retinal Images, International Conference on Wireless Communications, Signal Processing and Networking, WiSPNET 2018.
2. Bharkad S., Morphological and Neural Network Based Approach for Detection of Exudates in Fundus Images, Proceedings of the 2nd International Conference on Computing Methodologies and Communication, ICCMC 2018, pp. 891–894.
3. Salunke T. P., Bharkad S. D., Power point control using hand gesture recognition based on HOG feature extraction and k-nn classification, Proceedings of the International Conference on Computing Methodologies and Communication, ICCMC 2017, pp. 1151–1155.
4. Shejwal M. A., Bharkad S.D., Segmentation and extraction of text from curved text lines using image processing approach, IEEE International Conference on Information, Communication, Instrumentation and Control, ICICIC 2017, pp. 1–5.

5. Rode K. B., Bharkad S.D., Automatic segmentation of malaria affected erythrocyte in thin blood films, Lecture Notes in Computational Vision and Biomechanics, pp. 993–1002, 2019.
6. Shubham Toshniwal and Sangita Bharkad, An Exploration of Industrial Utility Monitoring Technologies For Energy Usage, International Journal of Scientific & Technology Research, Volume 8, Issue 08, pp.371–374, August 2019.
7. Priyanka Kapkar and S. Bharkad Lip Feature Extraction and Movement Recognition Methods: A Review, International Journal of Scientific & Technology Research, Volume 8, Issue 08, pp.50–55, August 2019.
8. Radha Tiwari, Sangita Bharkad, Part Marking Detection Using Machine Learning, International Journal of Scientific Development and Research (IJSDR), pp. 385–390, Oct. 2020.
9. Radha Tiwari, Sangita Bharkad, Application of Machine Learning, International Journal of Engineering Research and Applications, Vol. 10, Issue 11, (Series-III) , pp. 55–66, November 2020.
10. Bharkad S. D., Frequency domain analysis of grey level intensities for extraction of optic disc in retinal images, International Journal of Medical Engineering and Informatics, 13(4), pp. 297–307, 2021.
11. Kapkar P. P., Bharkad S.D., Double Authentication System Based on Face Identification and Lipreading, Communications in Computer and Information Science, pp. 214–224, 2021.
12. Pallavi Rane, Sangita Bharkad, Real-Time Sign Language Recognition System Using Convolutional Neural Network, GIS Science Journal, pp. 166-181, Volume 8, Issue 12, 2021.
13. Pallavi Rane, Sangita Bharkad, Sign Language Recognition System: Review Study, Journal of Emerging Technologies and Innovative Research (JETIR), pp. a576–a586, Volume 8, Issue 10, October 2021.
14. Akshata Wadgaonkar, Sangita Bharkad, Real Time Facial Emotion Recognition Using CNN, GIS Science Journal, pp. 919-927, Volume 9, Issue 12, 2022.
15. Akshata Wadgaonkar, Sangita Bharkad, Survey Paper on Facial Emotion Recognition, Journal of Information and Computational Science, pp. 44–55, Volume 12, Issue 10, 2022.



Dr. Sushama Agrawal
Ph.D. (Electronics Engineering)
Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 26 | 11 |
| <i>Citations</i> | 274 | 115 |
| <i>H Index</i> | 7 | 4 |
| <i>I 10 Index</i> | 7 | |

Publication in last five years:

1. Komal Ramne, S.S. Agrawal, "Statistical Methods to detect Counterfeit Indian Currency", International Journal of Scientific & Engineering Research, ISSN 2229-5518, Vol 9, Issue 6, June-2018
2. Pravin Borude, S.S. Agrawal, "Low Power 16-T CMOS Full Adder Design", International Conference on Intelligent Computing and Control Systems, June14-15,2018, ISBN:978-1-5386-2842-3
3. Swapnil Pimple, Gayatri Uttarwar, Nikita Patil, Nishigandha Bhagunde, S.S. Agrawal, "Cost Effective Stand-alone Parking Assistance System", 3rd International Conferences on Trends in Electronics and Informatics (ICOEI 2019)
4. Ashish Kamble, S.S. Agrawal, "Wavelet Based Digital Image Watermarking Algorithm Based on Fractal Images", International Conference on Electronics and Communication and Aerospace Technology, 12-14 June 2019, IEEE Xplore ISBN: 978-1-7281-0167-5

5. Nupur Somwanshi, S.S. Agrawal, "Enhanced Attendance System Using Intensity Normalization, Face Alignment and LBPH", International Journal of Scientific & Technology Research, Vol 8, No. 9, Sept 2019, 2306-2311
6. Y. Suryawanshi and S. Agrawal, "Driver Drowsiness Detection System based on LBP and Haar Algorithm", Fourth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 2020, pp. 778-783, doi: 10.1109/I-SMAC49090.2020.9243347
7. Kajal Muley, Sushama Agrawal, "Advance Smart Irrigation System Using IoT", International Journal of Scientific Research in Engineering and Management (IJSREM), Vol. 5, Issue 10, 1-6, 2582-3930, 2021
8. Agrawal, Sushma, Bhalchandra, Anjali. (2022), "Robust Imperceptible Gray Image Watermarking with LWT, SVD and QR Decomposition", International Journal of Computer Theory and Engineering, 14. 89-96, 2972-4511, <http://doi.org/10.7763/IJCTE.2022.V14.1315>
9. Agrawal Sushama, Bhalchandra Anjali "Firefly optimized robust, imperceptible, secure watermarking scheme", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 28, No. 2, Nov 2022, 1155-1163, <http://doi.org/10.11591/ijeecs.v28.i2.pp1155-1163>



Prof. S. B. Gundre

Ph.D. (Electronics Engineering)

Ph.D. Ongoing antenna design

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 08 | 08 |
| <i>Citations</i> | 40 | 13 |
| <i>H Index</i> | 2 | 2 |
| <i>I 10 Index</i> | 2 | |

Publication in last five years:

1. Sneha C Madre, S. B. Gundre, "OCR based Image text to speech conversion using MATLAB", Second International Conference on Intelligent Computing and Control Systems (ICICCS 2018) 14-15 June 2018
2. Shubham R. Dharwal, S. B. Gundre, "Gesture based real time control of robotic cart using wireless link between controller and cart", Second International Conference on Intelligent Computing and Control Systems (ICICCS 2018) 14-15 June 2018
3. Snehal Kapse, shital B. Gundre, "Fractal shape dual-band EBG integrated textile antenna", 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT) 2019.
4. Deepali K Chauhan, shital B. Gundre, "Two-Via slot type Dual band Textile antenna with AMC reflector", 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT) 2019.
5. Deepali K Chauhan, shital B. Gundre, "Two-Via slot type Dual band Textile

with AMC reflector”, 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT) 2019.

6. Shital B Gundre, Varsha .R. Ratnaparkhe, “Simple and flexible structure of dual band monopole wearable patch antenna ”, PCEMS 2022, VNIT Nagpur.

7. Shital B Gundre, Varsha .R. Ratnaparkhe, “Simple square shape electromagnetic band gap structure for wearable antenna”, PCEMS 2023, VNIT Nagpur.

8. Shital B Gundre, Varsha .R. Ratnaparkhe, “ A flexible dual- H shape monopole antenna with dual H shape EBG for WBAN” ,Journal of Integrated science and technology, January 2025.



Prof. Prachi H. Bhagat

Ph.D. (Electronics Engineering)
Ph.D. Ongoing Image Processing
Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 07 | 07 |
| <i>Citations</i> | 150 | 82 |
| <i>H Index</i> | 4 | 3 |
| <i>I 10 Index</i> | 2 | |

Publication in last five years:

1. Arduino-Based Smart Irrigation Using Sensors and ESP8266 WiFi Module
S Thakare, PH Bhagat, 2018 Second International Conference on Intelligent Computing and Control -2018
2. Industrial process monitoring using IoT
KS Shinde, PH Bhagat, 2017 International Conference on I-SMAC (IoT in Social, Mobile, Analytics)-2017
3. Virtual laboratory of control system
V Nagargoje, PH Bhagat, 2017 International Conference on I-SMAC (IoT in Social, Mobile, Analytics)-2017
4. Motion detection using continuous frame difference and contour based tracking
N Ghode, PH Bhagat, 2019 3rd international conference on trends in electronics and informatics-2019
5. Moving Object Detection with an IP camera
SA Atone, AS Bhalchandra, PH Bhagat, 2018 Second International Conference on Intelligent Computing and Control-2018
6. Coal Mine Monitoring System Based on Wireless Technology and ARM
DA Jakkan, P Bhagat, International Journal of Engineering Research 2, 6-2013

7. Gesture Analysis Using Image Processing: For Detection of Suspicious Human Actions

P Bhagat, AS Bhalchandra, Congress on Intelligent Systems, 515-530-2022



CSE

Department



Vijayshri A.Injamuri (Kamuni)

M.Tech (Computer Science & Engineering)

M.Tech Project: A Review of methods for Securing Linux operating System

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> |
|---|-----------------------|
| <i>Number of Publications till date</i> | 04 |

Publication in last five years:

1. Mokshali Bawiskar, Asst. Prof. Vijayshri Injamuri ,“Aspect Based Mobile Recommendation System”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-X, Issue-X, July 2019
2. Madhuri S. Gawai, Prof. Vijayashri A. Injamuri,” Various class categorization scheme using a machine learning technique to identify a lesion in brain image”, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 07 Issue: 12 | Dec
3. Punam Sanjay Sawale, Prof. Vijayshri A. Injamuri,” Finding Real Time Contextual Tweets on Twitter ”,International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 08 Issue: 05 | May 2021.
4. Sushama A. Deshmukh, R. S. Vaidya, Vijayshri Dipak Kamuni, & Sandeep Gaikwad “ Student performance prediction based on multiple-choice question test using neural network in the VLab platform”, Taylor & Francis online,Theoretical Issues in Ergonomics Science (TIES) Received 25 Jun 2022, Accepted 13 May 2023, Published online: 28 May 2023

15. Published a paper titled "Enhancement In Brain Tumor Diagnosis Using Mri Image Processing Techniques" at ICAICR-2018 Sponsored by Springer and CSI at Shimla India during 14-16 July 2018.
16. Published a paper titled "Android based American Sign Language Recognition System with Skin Segmentation and SVM" in IEEE International conference at IISC Bangalore India 2018.
17. Published a paper titled "Structuring Cloud Computing Using Big Data Analytics Solution: A Survey" at IEEE International conference on Communication and Electronics Systems (ICCES) 2016 at PPG Institute Coimbatore India.
18. Published a paper titled "Feature Extraction and selection from MRI Images for the brain tumor classification" at IEEE International conference on Communication and Electronics Systems (ICCES) 2016 at PPG Institute Coimbatore India.
19. Published a paper titled "Enhancing Information Security in Cloud Computing Environment Using Cryptographic Techniques" at IEEE International conference on Communication and Electronics Systems (ICCES) 2016 at PPG Institute Coimbatore India.
20. Published a paper titled "Examining the Document Image Binarization Technique for Degraded Document Images" at International conference on Technology and Business Management Dubai 2014.
21. Published a paper titled "An Improved Binarization Technique For Degraded Document Images Using Local Thresholding Method" at International Conference On Emerging Trends In Computer Science & Engineering (Icetcse-2014) And International Journal Of Pure And Applied Research In Engineering And Technology.



Dr. Vikul J. Pawar

Ph.D. (Computer Science and
Engineering)

Ph.D. project: Medical Imaging
Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 22 | 10 |
| <i>Citations</i> | 112 | 30 |
| <i>H Index</i> | 5 | 2 |
| <i>I 10 Index</i> | 3 | |

IPR:

01. A Utility patent published entitle "ORAL CANCER DETECTION USING DEEP LEARNING" in Publication of the Patent Office, India, Application No. 202321054868, The Patent Office Journal Dated 06/10/2023.
02. Design Patent on LUNG CANCER PREDICTION AND DETECTION USING DEEP LEARNING" in Publication of the Patent Office, India, Application No. 202121009683 A, The Patent Office Journal No. 11/2021 Dated 12/03/2021 page no.12804.
03. Design Patent "DS-SYSTEM: DOCTORS GUIDE SYSTEM FOR BRAIN TUMOR DIAGNOSIS USING DATA MINING AND BRAIN TUMOR DETECTION, CLASSIFICATION AND EVALUATION" in Publication of the Patent Office, India, Application No. 202021057092 A, The Patent Office Journal No. 05/2021 Dated 29/01/2021 page no.4410.
- Published a patent titled "EDUCATIONAL CLOUD FRAMEWORK- A NEW FINDING AS A BETTER PRIVATE CLOUD FRAMEWORK FOR EDUCATIONAL HUB" in Publication of the Patent Office, India, Application No.202021038371 A, The Patent Office Journal No. 38/2020 Dated 18/09/2020 page no.40985

Publication in last five years:

1. Published paper entitled "EXPLORING RADIOMICS DATASETS FOR BRAIN TUMOR DIAGNOSIS USING DATA MINING TECHNIQUES" Journal For Basic Sciences Volume 24, Issue 5, 2024.
2. Published paper entitled "Deep Learning Based Diabetic Retinopathy Disease Classification in Fundus Photographic Images" Journal For Basic Sciences Volume 24, Issue 5, 2024.
3. Published paper entitled "Early Assessment of Diabetic Retinopathy by Detecting Microaneurysm with Deep Neural Network" in INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY 17 (17), 1786-1790.
4. Published paper entitled "Lung Cancer Nodules Detection Using Ideal Features Extraction Technique in CT Images", in proceedings of International Conference on Advances in Computer Vision and Artificial Intelligence Technology (ACVAIT 2022) in ATLANTIS PRESS, A part of Springer Nature, https://doi.org/10.2991/978-94-6463-196-8_5
5. Published a paper entitled "Intensifying Lung Cancer Classification Model Using Hybrid-Layer Convolutional Neural Network with Enhanced-CSO Weight Optimization Algorithm", in the International Journal of Computing and Digital Systems, ISSN (2210-142X), Int. J. Com. Dig. Sys.13, No.1 (Apr-23), DOI:<http://dx.doi.org/10.12785/ijcdfs/130164>.
6. Published a paper entitled "Modified convolutional neural network for lung cancer detection: Improved cat swarm-based optimal training", in the journal of Web Intelligence Journal, SCOPUS, ESCI Indexed Journal, ISSN print 1570-1263, ISSN online 1875-9289), Volume 21, Issue 1, Pages 37-59, Publisher IOS Press.
7. Published a paper entitled "Pulmonary Nodule Detection and Classification In CT Images Over Employing R-CAD System", in The Seybold Report Journal (Scopus Indexed), ISSN No. 1533-9211, DOI 10.5281/zenodo.6962497

8. Presented paper entitled "Lung Cancer Nodules Detection Using Ideal Features Extraction Technique in CT Images", in International Conference on Advances in Computer Vision and Artificial Intelligence Technology (ACVAIT 2022) organized by Dept of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
9. Presented and published a paper titled "Evaluation on Lung Cancer Detection Using Computer Assisted Diagnosis (CAD) System" in IEEE 7th International Conference on Advanced Computing and Communication Systems (ICACCS) 2021 at Sri Eshwar College of Engineering (Autonomous), Coimbatore, Tamil Nadu, India.
10. Published a paper titled "Prediction of Degree Student Achievement Analysis" in the AICTE sponsored International Conference on Recent Innovations in Engineering and Technology (ICRIET 2020), Erode, Tamil Nadu, India during 04- 05,December2020.
11. Published a paper titled "Lung Cancer Detection System Using Image Processing and Machine Learning Techniques" at International Journal of Advanced Trends in Computer Science and Engineering Available Online at <https://doi.org/10.30534/ijatcse/2020/260942020>, UGC Approved Scopus Indexed [ISSN 0974-2034] Volume 9, Issue No.4, July – August 2020.
12. Published a paper titled "Assistive Technologies for Visually Impaired Persons Using Image Processing Techniques - A Survey" in 3rd Biennial International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R) at Dr. BAMU University Aurangabad India January 2020.
13. Published a paper titled "Implementation of Stable Private Cloud using Open Stack with Virtual Machine results" at International Journal of Computer Engineering and Information Technology (IJCEIT), UGC Approved Scopus Indexed [ISSN 0974-2034] Volume 11, Issue 4, April 2019.
14. Published a paper titled "Educational Cloud Framework - A Literature Review on Finding Better Private Cloud Framework for Educational Hub" at ICETCE-2019_Springer IETE Sponsored by Springer and IETE at Jaipur India during 1-2 February 2019.



Vrishali Chakkarwar

M.E. computer Science and
Engineering
Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 60 | 10 |
| <i>Citations</i> | 215 | 59 |
| <i>H Index</i> | 10 | 5 |
| <i>I 10 Index</i> | 10 | |

Publication in last five years:

1. Enhanced Sentiment Classification Using Geo Location Tweets Anil Phand, S., Chakkarwar, V.A. Proceedings of the International Conference on Inventive Communication and Computational Technologies, ICICCT 2018, 2018, pp. 881–886, 8473048
2. Automated Detection of Brain Tumor Cells Using Support Vector Machine Birare, G., Chakkarwar, V.A. 2018 9th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2018, 2018, 8494133
3. Application of Colorimetry to Determine Soil Fertility through Naive Bayes Classification Algorithm Agarwal, S., Bhangale, N., Dhanure, K., Chakkarwar, V.A., Nagori, M.B. 2018 9th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2018, 2018, 8494113
4. A Privacy Preserving Improvised Approach for QOS Aware Web Service Recommendation Khan, A.A., Chakkarwar, V.A. 2018 9th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2018, 2018, 8493866

1. Quick Insight of Research Literature Using Topic Modeling Chakkarwar, V., Tamane, S.C. Smart Innovation, Systems and Technologies, 2020, 165, pp. 189–197
2. Finding similar content posts using semantic textual similarity based on text segmentation through natural language processing Tadvi, R.C., Chakkarwar, V.A. International Journal of Scientific and Technology Research, 2020, 9(3), pp. 1452–1456
3. Social Media Analytics during Pandemic for Covid19 using Topic Modeling Chakkarwar, V., Tamane, S. Proceedings of the 2020 International Conference on Smart Innovations in Design, Environment, Management, Planning and Computing, ICSIDEMPC 2020, 2020, pp. 279–282, 9299617
4. Automatic Detection of Riots Using Deep Learning Jadhav, M.K., Chakkarwar, V.A. Communications in Computer and Information Sciencethis link is disabled, 2021, 1380, pp. 308–317
5. A Review on BERT and Its Implementation in Various NLP TasksVrishali Chakkarwar, Sharvari Tamane, Ankita Thombre,Publication date 2023/5/1, International Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022),pp 112-121 Publisher ,Atlantis Press
6. Information Retrieval Using Effective Bigram Topic Modeling Vrishali A. Chakkarwar^{1, *}, Sharvari C. Tamane², DOI 10.2991/978-94-6463-136-4_68, Proceedings of the International Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022), Series Advances in Computer Science Research



CRASH GAMING

70

69

68

MCA

Department





Dr. Shubhangi D. Sapkal
Ph.D. (Computer Science &
Engineering)
Asst. Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 50 | |
| <i>Citations</i> | 150 | 10 |
| <i>H Index</i> | 8 | |
| <i>I 10 Index</i> | 7 | |

Publication in last five years:

1. Effective Key Distribution Scheme using Paillier Cryptosystem in Wireless Sensor Networks, International Journal of Innovative Technology and Exploring Engineering 2019.
2. Identifying Human Face under video surveillance using Machine Learning Technique(Impact factor- 5.47), IJSDR 2019.
3. Finger Knuckle Print Based Biometric Identification of A Person Using LBP And Bernoulli Classifier(Impact factor – 5.47), IJSDR 2019.
4. A HYBRID APPROACH FOR DEEP LEARNING BASED FINGER VEIN BIOMETRICS TEMPLATE SECURITY, INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH AND ENGINEERING TRENDS, April 2020.
5. Shivam Shendre, Shubhangi Sapkal, A HYBRID APPROACH FOR DEEP LEARNING BASED FINGER VEIN BIOMETRICS TEMPLATE SECURITY, INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH AND ENGINEERING TRENDS, Volume 5 || Issue 4 || April 2020 || ISSN (Online) 2456-0774.

6. Nitin C. Sabne, Dr. Shubhangi D. Sapkal, Comparative Analysis of Association Rule Mining Based on Genetic Algorithm, INTERNATIONAL JOURNAL OF ADVANCED INNOVATIVE TECHNOLOGY IN ENGINEERING, 2022, 7(4), PP 26-32.
7. M. Vidya Jaykumar, 2Dr. Shubhangi Sapkal, 3Veena Jayakumar Menoki, Hipster Movie Recommender System Based On Personalized Hybrid Filtering Algorithm, INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD ISSN: 2455-0620 [Impact Factor: 6.719], Volume - 8, Issue - 9, September – 2022.



Dr. Avinash Gulve

Ph.D. (Computer Science and Engineering)

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 31 | 6 |
| <i>Citations</i> | 201 | 33 |
| <i>H Index</i> | 8 | 3 |
| <i>I 10 Index</i> | 6 | |

Publication in last five years:

1. Jaykumar S. Dhage, Gulve, A.K., "Deep Learning approach using Prophet Algorithm for the Human activity recognition with UCI Dataset" , Industrial Engineering Journal, Vol XVI, Issue- 3 pp. 81-91 2023.
2. Malkauthekar, M.D., Gulve, A.K., Deshmukh, R.R. et al., "Liver Cancer Classification Using Single Pass Neural Networks Based on Ultrasound Images: A Review" , Wireless Personal Communications, 130, pp.241-268 2023.
3. Veena Jayakumar Menoki, Praveen Shetiye, Gulve A K, "Automated System for Unmanned Railway Crossing" , International Journal For Innovative Research In Multidisciplinary Field, Vol.7 Issue 2, ISSN:2455-0620, pp.129-133, 2021.
4. Yashashree Belkhede, Praveen Shetiye, Gulve A K, "A Machine Learning Approach For Prediction Of Election Influence Using Social Media" , The International journal of analytical and experimental modal analysis, Vol.13 Issue 1, ISSN:0886-9367 , pp.83-90, 2021.

5. Yashashree Belkhede, Praveen Shetiye, Gulve A K, "Review On Election Prediction Using Machine Learning Technique" , The International journal of analytical and experimental modal analysis, Vol.12 Issue 9, ISSN:0886-9367 , pp.449-454, 2020.
6. Fatima Shaikh Anam, Shetiye Praveen, Gulve A K, "A Review On Weed Detection Using Image Processing" , The International journal of analytical and experimental modal analysis, Vol.12 Issue 9, ISSN:0886-9367 , pp.83-90, 2020.
7. Fatima Shaikh Anam, Shetiye Praveen, Gulve A K, "Weed Detection in Agriculture Using Soft Computing" , Journal of Xidian University, Vol.14 Issue 12, ISSN:1001-2400 , pp.409-417, 2020.
8. Vidyadhar S Shelke, Gulve A K, "Twitter Bot Detection Using Machine Learning" , IJSRD - International Journal for Scientific Research & Development|, Vol.8 Issue 5, ISSN: 2321-0613, pp.73-77, 2020.
9. Rekha S Thorat, Dr. P.C.Shetiye, Gulve A K, "Poverty prediction using satellite Imagery and Machine Learning" , International Journal of Scientific and Technology Research, Vol.9 Issue 2, ISSN:2277-8616, pp.4785-4789, 2020.
10. Rohini A Pandit, Dr. P.C.Shetiye, Gulve A K, "A review on social opinion dynamics model" , International Journal of Scientific Development and Research (IJS DR), Vol.4 Issue 7, ISSN:2455-2631, pp.202-204, 2019.
11. Rekha S Thorat, Dr. P.C.Shetiye, Gulve A K, "Study of poverty prediction using remote sensing data" , International Journal of Scientific Development and Research (IJS DR), Vol.4 Issue 7, ISSN:2455-2631, pp.338-341, 2019.
12. A.L.Tarange, Gulve A K, "Offline Signature Verification using Grid Indices Based Template Matching" , International Journal of Science and Research (IJSR), Vol.8 Issue 3, ISSN:2319-7064, pp.1508-1515, 2019.

13. Malkauthekar, M.D., Gulve, A.K., Deshmukh, R.R., "Brain Tumor Classification Using MR Images with OSTU, DWT, and K-means Clustering" , Computational Vision and Bio-Inspired Computing (Part of the Advances in Intelligent Systems and Computing book series (AISC,volume 1439),Springer, Singapore), ISBN:978-981-19-9818-8, pp.129-133, 2023.
14. Dhage, J.S., Gulve, A.K., Shetiye, P.C., "Modern Approaches for the Human Activity Detection and Recognition Using Various Image Processing Methods: A Review" , Futuristic Communication and Network Technologies. VICFCNT 2021. Lecture Notes in Electrical Engineering, vol 995. Springer, Singapore., 2023.



Dr. Praveen C. Shetiye

Ph.D. (Computer Sc. Engineering)

Assistant Professor

Publication in last five years:

1. A research paper titled "Poverty Prediction Using Satellite Imagery And Machine Learning" published in International Journal of Scientific & Technology Research, February 2020 Volume 9 Issue 4 page 4785-4789, Co-authored by Dr. Avinash K. Gulve and Rekha S. Thorat, Government College of Engineering, Aurangbad, Maharashtra, India
2. A research paper titled "A Review on Social Opinion Dynamics Models" published in International Journal of Scientific Development and Research (IJS DR), July 2019 Volume 4 Issue 7 page 202-204, Co-authored by Rohini Ashok Pandit and Dr. Gulve Avinash Khushal, Government College of Engineering, Aurangbad, Maharashtra, India
3. A research paper titled "Implementing Feature Selection Technique to estimate influence from voting records" published in International Journal of Research and Analytical Reviews (IJRAR), June 2019 Volume 6 Issue 2 page 748-753, Co-authored by Rohini Ashok Pandit and Dr. Gulve Avinash Khushal, Government College of Engineering, Aurangbad, Maharashtra, India
4. A research paper titled "A Critical Study of Electronic Voting Machine (EVM) Utilization in Election Procedure" published in International Journal of Trend in Scientific Research and Development (IJTSRD), March 2019 Conference Issue page 1-3, Co-authored by AV Nikam, SD Bhoite Government College of Engineering, Karad, Maharashtra, India

KNOWLEDGE IS POWER.... IF APPLIED

IT

Department

Dr. Shilpa Kabra (Laddha)
Government College of Engineering ,
Aurangabad.



Academic Profile

Designation: Assistant Professor.
Education: Ph.D. in Computer Science &
Engineering.
Thesis Title: Information Retrieval using
Ontology.

Patents

1. Intelligent Indoor Health Monitoring framework using low Energy Bluetooth Beacons.
2. Artificial Intelligence Based Computational Model For Spatial-Temporal And Emotional Reasoning of Humanoid Robots.
3. Optimised Skin care product recommendation system based on SVM based Machine Learning

Copyrights

4. Computer Software Work Dataset Analyzer.

Publications (Last 5 Years)

Books

5. Hybrid Intelligent Systems for Information Retrieval, CRC Press (2022).
6. Semantic Intelligent Computing and Applications, De Gruyter (2023).
7. Ai-Enabled Autonomous Network Control Using Reinforcement Learning, Vaagai International Publishing House (2025).

Selected Research Papers

- 2025: "Designing an Efficient Novel Model to Enhance NLP-Driven Blockchain Analytics," SN Computer Science.

- 2025: "Advancements in Explainable AI for Graph Neural Networks," IEEE Xplore.
- 2025: "Template Security in Biometrics System for Fingerprint Minutiae Templates Using Fuzzy Vault Method," Lecture Notes in Networks and Systems.
- 2024: "Detecting plagiarism using Latent Semantic Analysis and Cosine Similarity Approach," IEEE Xplore.
- 2024: "EduDocs: Document Verification using Blockchain," IEEE Xplore.
- 2023: "Necessity of Self-Explainability in AI: Insights from existing Social Projects," Springer.
- 2022: "Portable Healthcare Computing and Clinical Decision Support System Enabled by AI," IJESMS.
- 2022: "Visual Exploration of Fault Detection using Machine Learning and Image Processing," IJESMS.
- 2020: "Onto-Semantic Indian Tourism Information Retrieval System," Springer.

Dr. Archana W. Bhade

Ph.D. in Computer Science & Engineering

Associate Professor



- Designation: Associate Professor.
- Google Scholar Metrics: 20 publications with 11 citations.
- Scopus Metrics: 5 publications with 2 citations.

Intellectual Property Rights (IPR)

- Registration of Design for a "Machine Learning Based Device for Early Detection and Prediction of Alzheimer's Disease" (No. 442786-001).
- Submitted Utility patent on "A Device for Alzheimer's Patient Monitoring and Assistance" (No. 202521040772).
- Submitted Utility patent on "A device for blind and visually impaired people" (No. 202321065172).

Journal Publications

- In 2024, published "Prediction of Alzheimer's disease Using Stacked Ensemble Transfer Neural Network Model" in the International Journal of Intelligent Systems and Applications in Engineering.
- In 2024, published "Performance Evaluation of Stacked Ensemble Transferred Neural Network Model Using Adni And Oasis Dataset" in the Journal of Computational Analysis and Applications.
- In 2024, co-authored "Textual Compression Using Lamini-LM" in the International Research Journal on Advanced Engineering and Management (IRJAEM).
- In 2024, co-authored "A Mobile-Based System for Detecting Plant Leaf Diseases Using Deep Convolutional Neural Network" in IRJAEM.
- In 2024, published "Enhancing Alzheimer's Patient Care with an Automated Wearable Assistance Device based on AI and IoT" in the Indian Journal of Technical Education.

Conference Publications

- 2025: Published "Agri-Pulse" with IEEE.
- 2025: Published "SmrutiPankh: An Automated Real-Time Assistance Device for Alzheimer's Patients" at the ICT4SD Springer Conference.
- 2025: Published "MentalWell: Understanding Behaviour and Emotions" at the 6th World Conference on Artificial Intelligence (WCAIAA2025).
- 2024: Published "Enhancing Alzheimer's Patient Care with an Automated Wearable Assistance Device based on AI and IoT" at ICAESD 24.
- 2024: Published "Examining ADNI Image Dataset Preprocessing Techniques to Identify Alzheimer's Disease" at the 5th Congress on Intelligent Systems (CIS 2024).
- 2024: Published "An AI Companion for Blind and Visually Impaired People for Sustainable Development and Creating a Supportive Ecosystem in Society" at ICT4SD 2024 in Goa.
- 2023: Published "Comparative studies for detection of disease in plants using different approaches" at the International conference on paradigms of communication computing and data analytics.
- 2022: Published "Performance evaluation of machine and deep transfer learning techniques for the classification of Alzheimer disease using MRI images" at ICIVC2022.
- 2022: Published "Comparison of pre-processing and feature extraction techniques for Alzheimer detection using MRI images" at the Fifth International Conference on Computational Intelligence and Communication Technologies (CCICT).



Rahul B. Mannade

M. Tech. (CSE)

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 6 | 1 |
| <i>Citations</i> | 18 | |
| <i>H Index</i> | 2 | 1 |
| <i>I 10 Index</i> | 1 | |

Publication in last five years:

1. Rahul B Mannade, Hirendra H Hazare “A Literature Survey on Mobile-Learning Management Systems”, International Journal of Innovative Research in Advanced Engineering, 2017, Volume 2, Issue 4, Pages 6-12.
2. R. B. Mannade, H. H. Hazare “M-Learning Enabled Secure Exam Management Systems (MLESEMS)”, International Journal of Innovative Research in Advanced Engineering, 2017, Volume 4, Issue 7, Pages 1-7.
3. Rahul B. Mannade, Dr. Praveen C. Shetiye, Dr. Avinash K. Gulve, “Sentiment Analysis of Online Product Reviews using ML, DL and XAI Techniques: A Systematic Review”, 3rd International Conference on Intelligent System, Cognitive Science and Knowledge Engineering (ICKE2023), 08th and 09th May 2023, at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.



Dr. Smita Chavan

Ph.D. (Computer Engineering)

Ph.D. project: Cloud Security

Assistant Professor

| <i>Credentials</i> | <i>Google Scholar</i> | <i>Scopus</i> |
|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 24 | 7 |
| <i>Citations</i> | 25 | 3 |
| <i>H Index</i> | 3 | 1 |
| <i>I 10 Index</i> | 0 | |

IPR :

Patents:

1. Profile Based Mapping Social Media Sentiments Using Cloud Cluster Security and Deep Learning.
Application no: 202041031966, Application type-ordinary, Date of filling-27-07-2020, Field of invention: Computer Science, Publication date: 21-08-2020.
2. Intelligent Way to Identify the Cloud Based Attacks in Web Application Using Encryption Algorithm Application no: 202121000341, Application type-ordinary, Date of filling-05-01-2021, Field of invention: Computer Science, Publication date: 29-01-2021.
3. Oral Cancer Detection Device using deep learning Publication date:06/10/23
4. Deep Learning based method and system for detecting insulin leaf diseases. Publication date:24/11/23
5. Context-Aware IOT wearable Device for women's Personnel safety and Emergency response(in Process):May 2025

Copyrights:

01. Diary no: 1455/2020-CO/L, Literacy/dramatic, "Cloud cluster security policy using datacrypt based on ontology

Book Chapter:

R.A. Mahajan, S.M. Chavan, PA Khadkikar, GM Bhandari,"Design and development of Internet of Things and artificial intelligence-based medical imaging system", https://digital-library.theiet.org/content/books/10.1049/pbhe057e_ch9

Publication in last five years:

1. S.M.Chavan, Dr.S.C.Tamane,"Comparison of Symmetric and Asymmetric Algorithms for Cloud Storage Security ", International Journal of Advanced Science and Technology Vol. 29, No. 03s, (2020), pp. 785-791.
- 2.S.M.Chavan, Dr.S.C.Tamane,"Modsecurity: Ontology for Cloud Based Web Service Attacks", International Journal of Advanced Science and Technology Vol. 29, No. 9s, (2020), pp. 7766-7773.
- 3.S.M.Chavan, Dr.S.C.Tamane," Demerits, Detection & Prevention of SQL Injection Attacks Over the Cloud Computing ",International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 06, 2020 ISSN: 1475-7192,pp 12499-12507.
4. S.M.Chavan, Dr.S.C.Tamane,"Enhancement in cloud security for web application attacks",IEEE ICSIDEMPC 2020.
- 5.RA Mahajan, NK Shaikh, AB Tikhe, R Vyas, Dr .S M. Chavan,"Hybrid Sea Lion Crow Search Algorithm-Based Stacked Autoencoder for Drug Sensitivity Prediction From Cancer Cell ", International Journal of Swarm Intelligence Research (IJSIR) 13 (1), 1-21.
6. Dr.Smita Chavan, Dr.Rupali Mahajan,"Accelerating Cloud-Native Application: Automated Kubernetes Cluster Development", Journal of Data Acquisition and Processing 38 (ISSN: 1004-9037), 1312-1324.
7. Dr. Smita Chavan Dr. Pratibha Jadhav Dr. Rupali Mahajan Dr. Kaushalya Thopate," Web Application Security Threats: SQL Injection Attack", journal of eurochemicalbulletin ,doi: [10.48047/ecb/2023.12.si7.030](https://doi.org/10.48047/ecb/2023.12.si7.030)
8. Dr. Rupali Mahajan, Dr.Smita Chavan, Dr. PA Khadkikar," A secure authentication protocol for healthcare service in IoT with Q-net based secret key generation", Web Intelligence, vol. Pre-press, no. Pre-press, pp. 1-27, 2023, DOI: 10.3233/WEB-220104, 29 May 2023.
- 9.Dr. Vikul Pawar ,Aditya Sharma, Dr. Suraj Pardeshi, Dr. Satish Bhalshankar,

1Dr. Smita Chavan, Dr. Kailash Kharat ,” Deep Learning Based Diabetic Retinopathy Disease Classification in Fundus Photographic Images”, Journal For Basic Sciences, ISSN NO : 1006-8341, Volume 24, Issue 5, 2024.

10.. Dr. Kailash Kharat, Dr. Vikul Pawar , Dr. Suraj Pardeshi, Dr. Smita Chavan, Dr. Satish Bhalshankar, Dr. Prajakta Khadkikar,” EXPLORING RADIOMICS DATASETS FOR BRAIN TUMOR DIAGNOSIS USING DATA MINING TECHNIQUES”, Journal For Basic Sciences, ISSN NO : 1006-8341, Volume 24, Issue 6, 2024.

11. Dr. Satish Bhalshankar, Dr. Vikul Pawar , Dr. Suraj Pardeshi, Dr. Smita Chavan, Dr. Kailas Kharat, Mr. Jayanand Kamble,” Implementation of MARGEN: MARathi Question Answering GENERative Conversation Model using BILSTM”, Journal of Technology, ISSN: 10123407, VOLUME 12 ISSUE 6, 2024.

12 Dr. Suraj Pardeshi, Dr. Satish Bhalshankar, Dr. Kailash Kharat , Dr. Vikul Pawar, Dr. Smita Chavan, Dr. Rasika Kulkarni,” EXERCISING CONVOLUTIONAL NEURAL NETWORK BASED TECHNIQUES FOR DETECTING INDOOR OBJECTS TO ASSIST VISUALLY IMPAIRED INDIVIDUALS”, Journal of Engineering and Technology Management ,2024.

Dr. Kishor Prakash Wagh

02 Highest Qualification: Ph.D. in
Computer Engineering

03 Contact at: * Mobile: 9423978233

Email: kishorwagh2000@yahoo.com



Patents:

- Indian Patent Application 202521003280 titled: Development of a Framework for Sarcasm Detection and Emotion recognition for Code-Mixed Data Using Deep learning Approaches has been published in a patent journal on 07/02/2025.
- Indian Patent Application Number: 202524025916, Deep Learning based Cardiac Disease Diagnosis Framework, Dated: 10/02/2025.
- Application No.202521021542, Dynamic spatio-temporal pattern discovery: a novel grid and density-based clustering algorithm, Date of filing of Application: 10/03/2025, Publication Date: 21/03/2025.

Papers:

Following papers are presented in National and International conferences:

- Mayuri A. Rakhonde, Kishor P. Wagh, Ravi V. Mante, Survey on Sleep Stage Scoring Techniques using Feature Discovery, Fourth International Conference on Computer, Communication and Signal Processing (ICCCSP), 2020, Publisher: IEEE (Scopus Indexed).
- Prajakta P. Shelke, Kishor P. Wagh, Review on Aspect based Sentiment Analysis on Social Data, Eighth International Conference on Computing for Sustainable Global Development (INDIACom), 2021, Publisher: IEEE (Scopus Indexed).
- Swati Meshram, Kishor P. Wagh, Mining Intelligent Spatial Clustering Patterns: A Comparative Analysis of Different Approaches, Eighth International Conference on Computing for Sustainable Global Development (INDIACom), 2021, Publisher: IEEE (Scopus Indexed).
- Archana D. Wankhade, Kishor P. Wagh, Machine Learning Techniques for defending Cloud enabled IoT network, 2021 International Conference on Computational Intelligence and Computing Applications, ICCICA 2021, 2021 (Scopus Indexed).
- Archana D. Wankhade, Kishor P. Wagh, A Survey on Security Challenges and Defending Methods in Cloud Based Internet of Things Network, Proceedings - 2021 3rd International Conference on Advances in Computing, Communication Control and Networking, ICAC3N 2021, 2021, pp. 1414–1417 (Scopus Indexed).
- Archana D. Wankhade, Kishor P. Wagh, Design Secure Cloud Based IoT Network for End to End Cloud Communication, International Conference on Emerging Trends in Engineering and Technology, ICETET, 2023, 2023-April (Scopus Indexed).
- Swati Meshram, Kishor P. Wagh, Spatial Co-location Pattern Mining —A Survey of Recent Trends, Lecture Notes in Networks and Systems, 2024, 869 LNNS, pp. 265–280 (Scopus Indexed).
- Prajakta P. Shelke, Kishor P. Wagh, Comparative Study on Performance of Machine Learning Algorithm and Deep Learning Algorithms for Sarcasm Detection, International Conference RBUCON.Computing'25: Future Computing Technologies for Societal Development, 20-22 February, 2025 Nagpur.

Following papers are published in National/International Journal:

- Mayuri Rakhonde, Dr. Kishor Wagh, An Effective Approach for Sleep Stage Classification Based on PSG Recordings, IJSRCSEIT, Volume 6, Issue 2, PP 504-508, 2020.
- Mayuri Rakhonde, Dr. Kishor Wagh, Sleep Stage Classification for Prediction of Human Sleep Disorders by Using Machine Learning Approach, IJSRT, Volume 5, Issue 7, PP 1268-1272, 2020.
- P. P. Shelke, Kishor Wagh, A Survey of Sentiment Analysis and Emotion Classification of Social Data, BULLETIN MONUMENTAL - ISSN / e-ISSN 0007-473X, Volume 22, Issue 1, 2021.
- Swati Meshram, Kishor Wagh, Mining Co-Location Patterns in Spatial Dataset – A Review, BULLETIN MONUMENTAL - ISSN / e-ISSN 0007-473X, Volume 22, Issue 1, 2021.
- Dilip Uike, Kishor Wagh, Early Prediction of Heart Diseases Using Machine Learning, GIS Science Journal, ISSN No: 1869-9391, Volume 8, Issue 8, PP 103-111, 2021.
- Vishwaja Tambakhe, Kishor P. Wagh, Review on Exploring Similarity between Two Questions Using Machine Learning, International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN : 2456-3307, Volume 7 Issue 3, pp. 287-293, May-June 2021.
- Vishwaja Tambakhe, Kishor Wagh, Duplicate Question Pair Detection with Machine Learning, BULLETIN MONUMENTAL - ISSN / e-ISSN 0007-473X, Volume 22, Issue 7, 2021, PP.31-38.
- Swati Meshram, Kishor P Wagh, A Novel and Efficient Spatio-Temporal Clustering Algorithm to Discover Patterns in Indian Earthquake Data, International Journal on Recent and Innovation Trends in Computing and Communication, SSN: 2321-8169 Volume: 11 Issue:10, PP.2070-2077, 2023.
- Archana D. Wankhade, Kishor P Wagh, Implementation of Secure Cloud Based IoT Communication Using Lightweight Cryptography, International Journal of Intelligent Systems and Applications in Engineering, ISSN:2147-6799, Volume: 12, Issue:01, PP. 310-316, 2023 (Scopus Indexed).

- Archana D. Wankhade, Kishor P Wagh, Implementation of Attack Detection and Mitigation for Securing Cloud Based IoT Network, Journal of Theoretical and Applied Information Technology, ISSN: 1992-8645 Vol.102. No 9, 2024 (Scopus Indexed).
- Swati Meshram, Kishor P Wagh, A Novel and Efficient Spatio-Temporal Colocation Pattern Mining Algorithm, Journal of Electrical Systems, ISSN: 1112-5209, Volume: 20, Issue:02, PP. 1436-1446, 2024.
- Prajakta P Shelke, Kishor P Wagh, Enhanced Sarcasm and Emotion Detection Through Unified Model of Transformer and FCNets, Journal of Electrical Systems, ISSN: 1112-5209, Volume: 20, Issue: 03, PP. 551-565, 2024.
- Kishor . P. Wagh, Dilip R. Uike, Amol P. Bhagat, Deep Learning Framework for Automatic Cardiac Diagnosis, International Journal of Intelligent Systems and Applications in Engineering, ISSN:2147-6799, Volume: 12, Issue:03, PP. 2948-2954, 2024.
- Swati Meshram, Kishor P Wagh, A Grid and Density Based Adaptive Clustering Algorithm for Spatio-Temporal Data Mining, International Journal of Intelligent Systems and Applications in Engineering, ISSN:2147-6799, Volume: 12, Issue:03, PP. 2485-2491, 2024.
- Dilip R. Uike, Kishor . P. Wagh, Amol P. Bhagat, Feature Set Modelling for Precise Cardiac Disease Diagnosis using Deep Learning, African Journal of Biological Sciences, ISSN: 2663-2187, Volume: 06, Issue: 05, PP. 9000-9014, 2024.
- Swati Meshram, Kishor P Wagh, Effective Maximal Co-location Pattern Mining- A Hybrid Approach for Spatial and Spatio-temporal Data, International Journal of Advances in Soft Computing and its Applications, 2024, 16(3), PP. 214–230, 2024 (Scopus Indexed).
- Swati Meshram, Kishor P Wagh, Dynamic Spatio-temporal Pattern Discovery: A Novel Grid and Density-Based Clustering Algorithm, IAES International Journal of Artificial Intelligence, 2025, 14(1), PP. 397–407, 2025 (Scopus Indexed).

- Archana D. Wankhade, Kishor Wagh, Implementation of Secure Framework for Cloud Based IoT Network Using Machine Learning Approach and Lightweight Cryptography, Indian Journal of Technical Education, Volume 48, Special Issue, No 1, PP. 41-48, January 2025 (UGC-Care).
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|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 5 | 5 |
| <i>Citations</i> | 24 | 17 |
| <i>H Index</i> | 3 | 2 |
| <i>I 10 Index</i> | 1 | |

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|---|-----------------------|---------------|
| <i>Number of Publications till date</i> | 218 | 218 |
| <i>Citations</i> | 5627 | 3224 |
| <i>H Index</i> | 36 | 28 |
| <i>I 10 Index</i> | 78 | |

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