



# GOVERNMENT COLLEGE OF ENGINEERING AURANGABAD (CHHATRAPATI SHAMBAJI NAGAR)



# 2024

College Research Competence



# 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 acco-





mplishments 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.

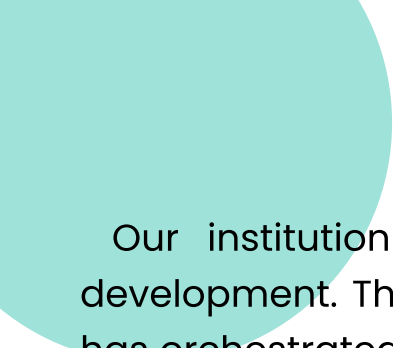


At our college, research is not just a pursuit; it is a way of life. We boast five distinguished research centers under the aegis of BAMU (Dr. Babasaheb Ambedkar Marathwada University) – Civil, Mechanical, Electrical, ENTC (Electronics and Telecommunication), and CSE (Computer Science and Engineering). 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 yellowish-tan facade and grey vertical accents. The building has several windows with metal grilles. Large, leafy trees are in the foreground, partially obscuring the building. The ground is paved and has some small plants and a trash can.

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>	138	65
<i>H Index</i>	4	4
<i>I 10 Index</i>	3	2

**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. Vaijwade 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

# 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. 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. 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. 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

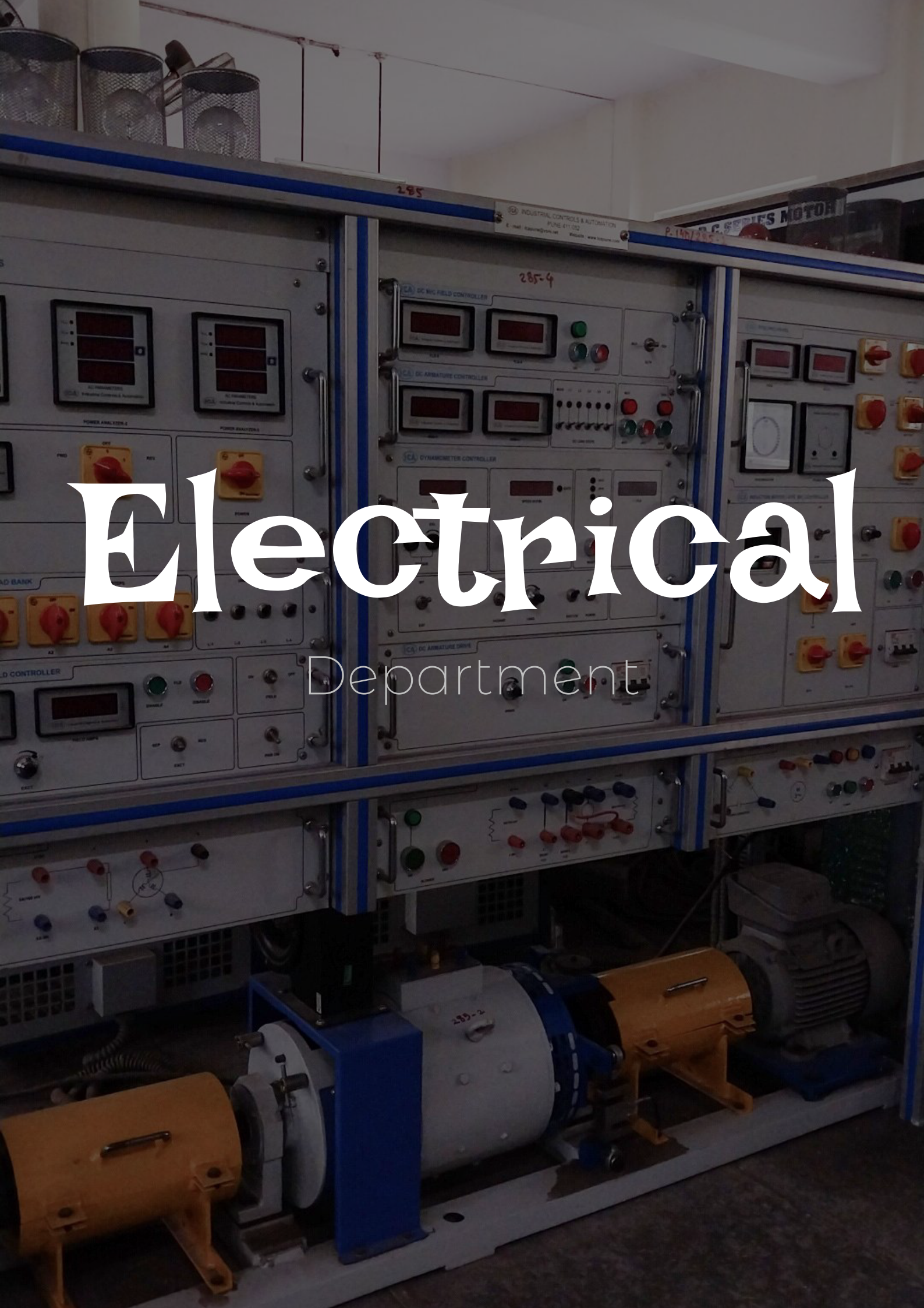
5. Dr U.V.Hambire, influence of zirconia based dental composite on abrasive wear, ARPN Journal of Engineering and Applied Sciences volume 12 issue 10 page no 1166 to 1169
6. Dr U.V.Hambire, optimisation of flexural strength in zirconia nanoclusters of the bis-gma and tegdma based dental composites IOP 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 agent Indian 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









# 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. Vandana Abhay Kulkarni  
(Deodhar)**

Ph.D. (Electrical Engineering)  
Ph.D. project: HVDC Transmission  
System  
Associate Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	36	21
<i>Citations</i>	126	36
<i>H Index</i>	7	4
<i>I 10 Index</i>	7	

**IPR:**

1. 01. Title of IPR: "A Battery Charger Assembly For Off-Grid Applications Powered By Photovoltaic Solar Energy" A Patent Published on date 12/05/2023, Patent Application No. 202321026962-A in patent office journal no 19/2023.

**Publication in last five years:**

1. Subhash Murkute, Vandana A. Kulkarni (Deodhar), "Performance analysis of modified residential PV system configuration under mismatch conditions," e-Prime - Advances in Electrical Engineering, Electronics and Energy, Volume 8, 2024,100573,ISSN 2772-6711, <https://doi.org/10.1016/j.prime.2024.100573>. (<https://www.sciencedirect.com/science/article/pii/S2772671124001530>)
2. S. Murkute and V. A. Kulkarni Deodhar, "Performance Analysis and Comparison of Hybrid Interconnections Photovoltaic System Architecture Under Partial Shading," IEEE 9th International Conference for Convergence in Technology (I2CT), Pune, India, 2024, pp. 1-6, doi: 10.1109/I2CT61223.2024.10544153.



3. S.V. Murkute, V.A. Kulkarni, "Performance Analysis of Submodule Level Interconnection Scheme for PV System Under Partial Shading", Thirteenth International Conference on control system and power electronics (CSPE-2024), Feb 2024, Mumbai, India.
4. Anjali V. Deshpande, Dr. V. A. Kulkarni (2023) "Optimal Placement and Adaptive Controlling For Doubly-Fed Induction Generator Integration in Small Signal Stability" Journal of Theoretical and Applied Information Technology (JTAIT) ISSN: 1992-8645 Vol.101. No 10.(May-2023 issue) Page Numbers 4059-4070
5. Anjali V. Deshpande, Dr. V. A. Kulkarni (2022) "Synthetic Inertia Control, small Signal Stability and Power System Stabilizer for DFIG" Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition) ISSN: 1671-5497 Vol: 41 Issue: 04-2022 Page Numbers 232-245
6. Anjali V. Deshpande, Dr. V. A. Kulkarni (2019) "Active and Reactive Voltage Control for DFIG Interface", International Journal of Advanced Trends in Computer Science and Engineering (IJATCSE), ISSN 2278-3091, Vol.8, No.6 (November - December 2019 issue), Page Numbers 3375 – 3380
7. Anjali V. Deshpande, Dr. V. A. Kulkarni (2020) "Dfig for variable speed wind energy generation and its characteristics", International Journal of Scientific and Technology Research – ISSN 2277-8616, volume 9-issue 3, March 2020, page Numbers 1905-1908
8. Anjali V. Deshpande, Dr. V. A. Kulkarni, "Doubly Fed Induction Generator - A wind Technology in the Power System", paper presented at the third International Conference on IoT in Social, Mobile, Analytics and Cloud (I-SMAC 2019), 12-14 December, 2019, Palladam, India.
9. Anjali V. Deshpande, Dr. V. A. Kulkarni, "A simplified Model of DFIG in wind Integrated Power System", paper presented at the third International Conference on computing Methodologies and communication ICCMC-2019, 27-29 March, 2019, Erode, India
10. Shahapure, Sachin Baliram, and Vandana A. Kulkarni Deodhar. "Modelling and Field Oriented Control of Grid Interfaced Solar Integrated Synchronous Motor Drive." 2022 2nd Asian Conference on Innovation in Technology (ASIANCON). IEEE, 2022 .

11. Shahapure Sachin B., and Vandana A. Kulkarni Deodhar. "Modeling and Field Oriented Control of Permanent Magnet Synchronous Motor Drive." 2023 IEEE 8th International Conference for Convergence in Technology (I2CT). IEEE, 2023.
12. Shahapure Sachin B., and Vandana A. Kulkarni Deodhar. "Expert System for Fault Diagnosis and Monitoring and Comparative Analysis of FOC and DTC Methods for Grid Interfaced Solar Integrated BLDC Drive" Communicated to Journal for Publication.
13. Shahapure, Sachin B., Vandana A. Kulkarni, and Ramchandra P. Hasabe. "Performance Analysis of Renewable Integrated UPQC." Volume 10 Issue 3. IJEER Forex Publication USA.
14. Shahapure, Sachin B., Vandana A. Kulkarni, and Sanjay M. Shinde. "A Technology Review of Energy Storage Systems, Battery Charging Methods and Market Analysis of EV Based on Electric Drives." Volume 10 Issue 1. IJEER Forex Publication USA.
15. Subhash Murkute, Vandana A. Kulkarni (Deodhar), "New high performance PV system architecture for mitigation of partial shading effects", e-Prime - Advances in Electrical Engineering, Electronics and Energy, Volume 5, 2023,100189, ISSN 2772-6711, (<https://www.sciencedirect.com/science/article/pii/S2772671123000840>)
16. Subhash Murkute, Vandana A. Kulkarni (Deodhar), " Novel Differential Power Processing Technique for Uneven Partial Shading Mitigation in PV Systems", International Journal of Applied Power Engineering (IJAPE), p-ISSN 2252-8792, e-ISSN 2722-2624, IN editing.
17. Vikas V Kulkarni., Vandana A. Kulkarni "Energy Efficient Photovoltaic Systems using Thermoelectric Cooling System" ISSN: 2321-8169 Volume: 11 Issue: 5 , International Journal on Recent and Innovation Trends in Computing and Communication
18. Vikas V Kulkarni, Vandana Kulkarni, "Performance Optimization of Photovoltaic Systems using TEC, Paper ID: 5, 2022 International Conference on Futuristic Technologies (INCOFT), IEEE conference 2022

19. Vikas V Kulkarni, Vandana Kulkarni,, “Modeling and Evaluation of a Hybrid Photovoltaic-Thermoelectric System to Obtain a Higher Energy Yield under Identical Operating Conditions” Paper ID: 1425, May 2023, 4th International Conference for Emerging Technology (INCET), IEEE conference 2023
20. V. V. Kulkarni, V. A. Kulkarni, Anuj Marathe, “Design and development of solar panel testing rig using LABVIEW” International journal for science and advance research in technology, Volume 2, Issue 6 in June 2016
21. V. V. Kulkarni, V. A. Kulkarni, Romharshal Talele, “PID Controller based DC Motor Speed Control”, September 17 Volume 5 Issue 9 , International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, PP: 35 – 38
22. V. V. Kulkarni, V. A. Kulkarni , Sreelekha Vadi, ‘Performance Evaluation of Thermoelectric cooler “ IEEE sponsored 1st International Conference on Computing, Communication, Electrical, Electronics, Devices Signal Processing. CCEEDS-17 , S.S.C.O.E. Vijaywada, AP
23. Ashwini katke ,Dr. Vandana A. Kulkarni . “ Series Voltage regulator For a Distribution Transformer to Compensate Voltage Sag And well” (JETIR2022)
24. Anupam Kumar Roy ,Ulhas Shiurkar ,Dr. V.A. Kulkarni B. Raja Guru,” Review on Stability and Power Quality Problem and Mitigation on Renewable Energy Penetration in Grid System”, Ijraset, 2022-01-26
25. Anupam Kumar Roy ,Ulhas Shiurkar ,Dr. V.A. Kulkarni . “Grid –Trid Inverters Control based on D-Q Control Algorithm and Review of different control method and controllers” (ZKG INTERNATIONAL ISSN : 2366-1313)
26. Rahul Bibave, Dr. Vandana .A. Kulkarni, “Maximum Power Extraction From Wind Energy System By Using Perturbation And Observation Method”.(IEEE-ICSEDPS 2018)
27. Ajit K. Jadhav, Dr. Vandana .A. Kulkarni, “Improvement In Power System Stability Using SSSC Based Damping Controller”.(IEEE-ICSEDPS 2018)
28. Ajit K. Jadhav, Dr. Vandana .A. Kulkarni, “A Review On Improvement In Rotor Angle And Power System Stability Using SSSC Controller”.(ICCPEIC 2018)
29. Shridhar Rankhude, , Dr. Vandana .A. Kulkarni, “DC/DC Buck Power Converter As Smooth Starter For PMDC Motor Based On Cascade Control”.(ICCPEIC 2018)
30. Shridhar Rankhude, , Dr. Vandana .A. Kulkarni, “Comparative Analysis Of PID And SMC Controller For Speed Control Of DC Motor –submitted”
31. Shridhar Rankhude, , Dr. Vandana .A. Kulkarni, “Sliding Mode Controller (SMC) Governed Speed Control Of DC Motor”.( RTEICT 2018)



32. Avinash Ramrao Waghmare, , Dr. Vandana .A. Kulkarni, “Three-phase To Two-Phase Transformation of Asynchronous Machine By Reference Frame Theory”. (IJSTR 2019)
33. Avinash Ramrao Waghmare, Dr. Vandana .A. Kulkarni , “Types of Harmonics in Induction Machine Drive and their Mitigation Techniques”. (IJSRD 2019)
34. Abhilash Nilkanth Jadhav, , Dr. Vandana .A. Kulkarni ,”Simulation and Analysis of Solar Powered Brushless DC Motor”.(IJSTR 2019)
35. Abhilash Nilkanth Jadhav, , Dr. Vandana .A. Kulkarni, “MPPT Techniques for PV Connected BLDC Motor Drives”.( IJSRD 2019)
36. Shubham Umate, , Dr. Vandana .A. Kulkarni, “A Review on Power Quality Improvement Using Filters”.( IJSRD 2019)
37. Shubham D. Umate, Dr. Vandana .A. Kulkarni, “Estimation of THD of Nonlinear loads and Mitigation of Harmonics using Active Filters”.(ICCES 2019 )
38. Abhilash Nilkanth Jadhav, Dr. V.A. Kulkarni, “Simulation and Analysis Of Powered Brushless DC Motor” .(ISTR 2019)



## **Nitin Phadkule**

Ph.D. (Electrical Engineering)

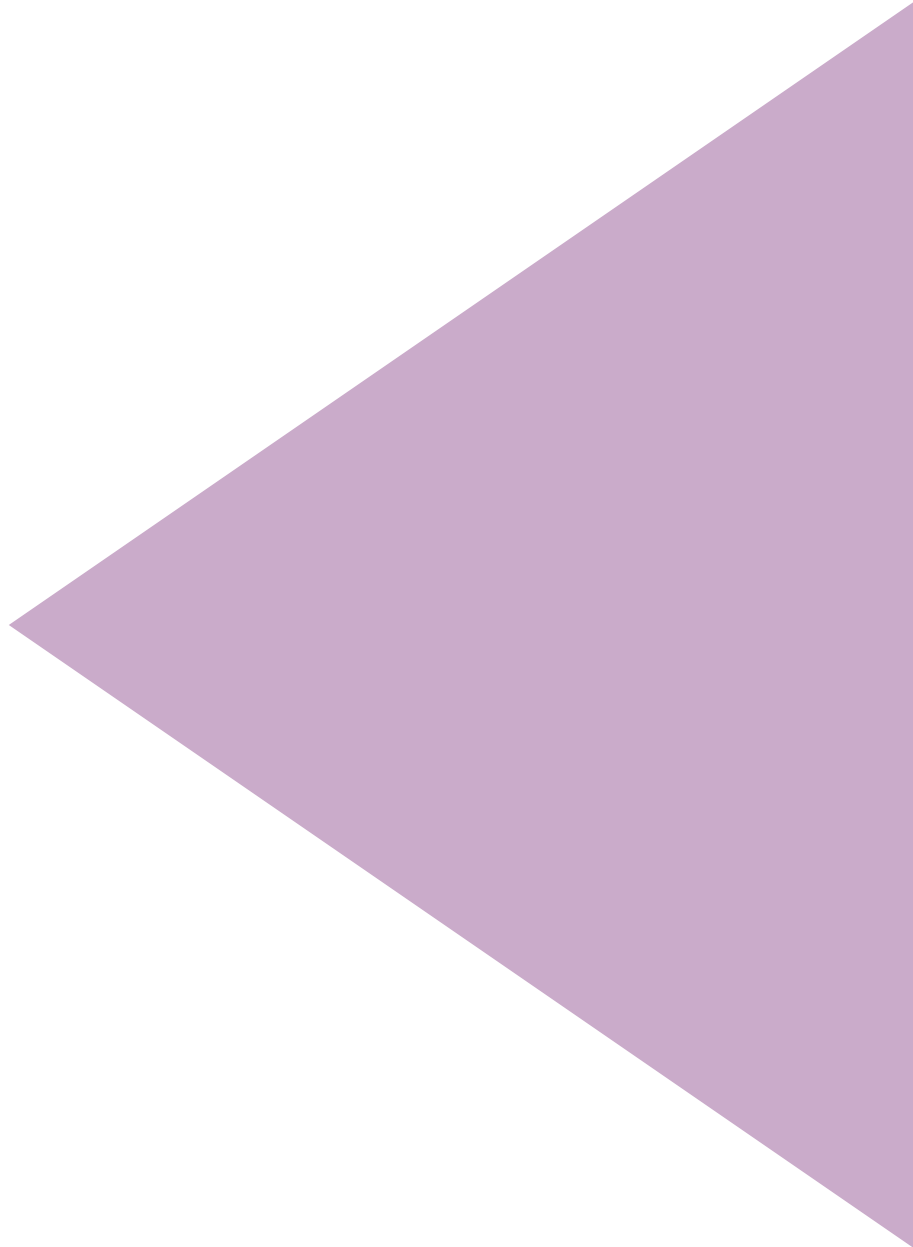
Associate Professor

<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 IJAR SCT







## **Dr. Sanjay M Shinde**

Ph.D. (Electrical Engineering)

Associate Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	45	12
<i>Citations</i>	62	56
<i>H Index</i>	3	5
<i>I 10 Index</i>	2	0

### **Publication:**

#### **Journal papers:**

1. Yogesh Kirange, Sanjay M. Shinde, " Voltage source inverter with three phase preventer for three phase induction motor" National conference on Recent Trends in Electrical Engineering, Government College of Engineering, Karad, February 16-17, 2017
2. Nikhil Ganveer, Sanjay M. Shinde, " Performance Analysis of Induction Generator in Wind Power Systems" National conference on Recent Trends in Electrical Engineering, Government College of Engineering, Karad, February 16-17, 2017
3. Sagar D. Tayde, Sanjay M. Shinde, " Statistical Analysis of Monthly Solar Radiations and Wind Speed Data " International Conference on Emerging Trends and Innovations in Engineering and Technological Research ( ICETIETR 2k18) ToC H Institute of Science & Technology, Arakkunnam, Ernakulam, Kerala, ISBN No. 978-1-5386-5743-0

4. Prerna R. Guhe, Sanjay M. Shinde, "Analysis of Control Schemes for StandAlone Wind Energy Conversion System" (ICIETS-2018) NIE Institute of Technology , Mysore, Karnatka
5. Prerna R. Guhe, Sanjay M. Shinde, "A Review on Control Scheme for StandAlone WECS" ( ICCPEIC 2018) Adhiparasakthi Engineering College, Melmaruvathur, TN
6. Abhishek Purushottam Taur, Sanjay M Shinde, " Effects of Grain Oriantation and Switching Temperature Rise in Switchgear Contact Material" 978-1-5386-5629- 7/18/\$31.00 ©2018 IEEE.
7. Renuka Rasal, Sanjay M. Shinde "Modelling and Simulation of Hydro Power Plant with Reversible Turbine and Synchronous Generator" 5th International Conference on Computing, Communication, Control and Automation (ICCUBEA-2019), Pimpri Chinchwad College of Engineering Pune, Sep. 19-21 2019
8. Rucha Gawai, Sanjay M. Shinde "Power sharing analysis of Grid connected threephase Solar roof system" 5th International Conference on Computing, Communication, Control and Automation (ICCUBEA-2019), Pimpri Chinchwad College of Engineering Pune, Sep. 19-21 2019
9. Bharti Karapate, Sanjay M. Shinde "Performance of SPV Array fed Small Variable Speed Pumped Storage Power Plant" 5th International Conference on Computing, Communication, Control and Automation (ICCUBEA-2019), Pimpri Chinchwad College of Engineering Pune, Sep. 19-21 2019
10. Sandip A. Gaikwad, Sanjay M. Shinde "Review on Five-phase Induction Motor fed by Five-phase Voltage Source Inverter with different Conduction Mode "International Conference on Industry 4.0 Technology (I4Tech-2020), Vishwakarma Institute of Technology Pune, Feb. 13-15 2020
11. Madhu Shilayyanavarmath, Sanjay M Shinde, "Performance Analysis of Multilevel Inverter Based on Switching Device" International Conference on "Electrical Systems and Technologies" organized by Department of Electrical Engineering, Government College of Engineering, Aurangabad, Maharashtra State, India during 19th - 20th March, 2021
12. Madhu Shilayyanavarmath, Sanjay M Shinde," Bidirectional Three Level Power Converter Analysis Based on Different Control Techniques Advancement of Signal Processing and its Applications Volume 04 Issue 02 Year 2021

13. Vaishnavi N Mantri, Sanjay M Shinde, "Power Quality Assessment of Tribrid System" International Conference on "Electrical Systems and Technologies" organized by Department of Electrical Engineering, Government College of Engineering, Aurangabad, Maharashtra State, India during 19th - 20th March, 2021
14. Shital Bakal, Sanjay M Shinde," A Review on SEPIC Converter fed Three- phase Induction Motor 5TH INTERNATIONAL CONFERENCE ON ENGINEERING RESEARCH & INNOVATION EQUINOX – 2020
15. Shital Bakal, Sanjay M Shinde," VOLTAGE CONTROLLED SEPIC CONVERTER FED INDUCTION MOTOR DRIVE" Journal of Research in Engineering and Applied Sciences JREAS, Vol. 06, Issue 01, Jan 2021
16. Tejeshree J. Bhangale, S M Shinde," Analysis of Proportional Integral Controller and Fuzzy Logic Controller for Single Phase Induction Motor, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-10, August 2020
17. Sachin B. Shahapure, Vandana A. Kulkarni (Deodhar), Sanjay M. Shinde," A Technology Review of Energy Storage Systems, Battery Charging Methods and Market Analysis of EV Based on Electric Drives International Journal of Electrical and Electronics Research (IJEER) Open Access | Rapid and quality publishing Review Article | Volume 10, Issue 1 | Pages 23-35 | e-ISSN: 2347-470X
18. D.G.Himpalnerkar, Sanjay M. Shinde," Solar Powered Unmanned Aerial Vehicle with Active Output Filter under Non-Linear Load Conditions" International Journal of Scientific & Engineering Research Volume 13, Issue 5, May-2022
19. Kalyani Salunke, S M Shinde," Fuzzy PID Controller Design for Brushless DC Motor" Journal of Control System and its Recent Developments Volume 04 Issue 03 Year 2021
20. Kalyani Salunke, S M Shinde," Enhancement of BLDC Motor Speed Control Output using Fuzzy PID Controller" organized by Department of Electrical Engineering, Government College of Engineering, Aurangabad, Maharashtra State, India during 19th - 20th March, 2021





## Dr. Sandhya Kulkarni

Ph.D. (Electrical Engineering)

Ph.D. Research Topic Fault Tolerant Control  
of Permanent Magnet Synchronous  
Machines

Associate Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	20	5
<i>Citations</i>	54	12
<i>H Index</i>	3	3
<i>I 10 Index</i>	2	2

### Publication in last five years:

#### Journal papers:

1. 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. Article ID: IJEET\_12\_09\_012 Available online at <https://iaeme.com/Home/issue/IJEET?Volume=12&Issue=9> ISSN Print: 0976-6545 and ISSN Online: 0976-6553 DOI: <https://doi.org/10.34218/IJEET.12.9.2021.012>
2. Mrs. S S Kulkarni and Dr. A. G. Thosar, " Performance Analysis of Permanent Magnet Synchronous Machine due to Winding Failures "paper id: IJEER110109, American Journal, International Journal of Electrical & Electronics Research (IJEER, ISSN: 2347-470X) Volume: 9, Issue 3, January 2022, Scopus indexed. <https://ijeer.forexjournal.co.in/archive/volume-9/ijeer-090308.html>, [doi.org/10.37391/IJEER.090308](https://doi.org/10.37391/IJEER.090308)

3. Mrs. S S Kulkarni and Dr. A. G. Thosar, "Performance Analysis of Fault-Tolerant Operation of PMSM using Direct Torque Control and Fuzzy Logic Control", (IJEER, ISSN: 2347-470X) Volume: 10, Issue 2, June 2022, Scopus indexed.<https://ijeer.forexjournal.co.in/archive/volume-10/ijeer-100240.html>American Journal Scopus indexed journal, IJEER.
4. P. Tamboli, Mrs.S.S.Kulkarni 2, Dr. A.G. Thosar , "A Review : Role of Energy Efficiency in Industrial Management", 2020 IJCRT | Volume 8, Issue 6 June 2020 | ISSN: 2320-2882
5. P. Indurkar, Mrs.S.S.Kulkarni, Dr. A.G. Thosar, " Review on Solar Water Pumping System Employing PMSM", Published In IJCRT ( [www.ijcrt.org](http://www.ijcrt.org) ) & 7.97 Impact Factor by Google Scholar, Volume 8 Issue 6 , Date of Publication: June 2020 2020-06-25 22:57:42, ISSN: 2320-2882. <http://ijcrt.org/papers/IJCRT2006491.pdf>
6. 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, DOI:10.15680/IJIRSET.2021.1001085
7. 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 [www.ijera.com](http://www.ijera.com) ISSN: 2248-9622, Vol. 11, Issue 2, (Series-V) February 2021, pp. 12-15, Impact factor 6.465, DOI: 10.9790/9622-1102051215. <http://www.ijera.com/papers/vol11no2/Series-5/C1102051215.pdf>
8. Yogita Sakhare, Mrs. S S Kulkarni, " Performance Evaluation of IM and PMSM with Multilevel Inverter for Electric Vehicle Application", e-ISSN: 2278 – 8875, p-ISSN: 2320 –3765, [www.ijareeie.com](http://www.ijareeie.com), Impact Factor: 8.18,Volume 11, Issue 6, June 2022,|DOI:10.15662/IJAREEIE.2022.1106001
9. 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 [www.ijrar.org](http://www.ijrar.org) (E-ISSN 2348-1269, P- ISSN 2349-5138) International Journal of Research and Peer Reviewed Journal

10. Rohit Andore, Dr. S. S. Kulkarni, Dr. A. G. Thosat, “ Energy Meter and Power Theft Monitoring”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE)| e-ISSN: 2278 – 8875, p-ISSN: 2320 – 3765, Impact Factor: 8.18 , Volume 12, Issue 2, February 2023, DOI:10.15662/IJAREEIE.2022.1202007

### International Conferences :

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. International Conference.
2. Mrs. S S Kulkarni and Dr. A. G. Thosar , “Effect of HVDS system in Agricultural pumps-A Case study”, SNIST Institute Hyderabad, International Conference, 3-4/7 / 2009
3. P. Tamboli, Mrs.S.S.Kulkarni2, Dr. A.G. Thosar, “Energy Efficiency in Manufacturing Industry and analysis of Industrial Motors”,4 th IEEE International Conference RVS Technical campus Coimbatore, 5-7 Nov. 2020, ICEA2020,Xplore ISBN-978-1-7281-6387-1.
4. Rohit Andore, Dr. S. S. Kulkarni, Drr. A. G. Thosar, “Energy Meter and Power Theft Monitoring System”, IEEE International Conference, 2023 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS) |ISBN- 979-8-3503-9874-8/23/\$31.00 ©2023 IEEE, DOI: 0.1109/SCEECS57921.2023. 10062967, <https://ieeexplore.ieee.org/document/1006296>





**DHOTE V.P.**

ME (Electrical Engineering)

Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	31	18
<i>Citations</i>	115	57
<i>H Index</i>	6	4
<i>I 10 Index</i>	3	

**Publication in last five years:**

1. A. Jahagirdar, A. Thosar and V. P. Dhote, "Study of High Voltage Inductive Voltage Transformer for Transients and Ferroresonance," 2018 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2018, pp. 174-180, doi: 10.1109/ICPECTS.2018.8521570.
2. A. Tayade, V. P. Dhote and A. Thosar, "Study on Demand Side Management in Microgrid using Electric Spring," 2018 International Conference on Current Trends towards Converging Technologies (ICCTCT), Coimbatore, India, 2018, pp. 1-6, doi: 10.1109/ICCTCT.2018.8551050.
3. R. M. Patil, V. P. Dhote and A. Thosar, "Comparative Study of PWM Techniques to Feed Permanent Magnet Synchronous Motor," 2018 International Conference on Current Trends towards Converging Technologies (ICCTCT), Coimbatore, India, 2018, pp. 1-6, doi: 10.1109/ICCTCT.2018.8550906.
4. M. Pathan, A. Thosar and V. Dhote, "Bus Voltage Control of DC Microgrid using Sliding Mode Control," 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), Bangalore, India, 2018, pp. 1418-1424, doi: 10.1109/RTEICT42901.2018.9012390.

5. A. M. Tayade, V. P. Dhote and A. G. Thosar, "Demand Side Management and Voltage Regulation in Microgrid Using Electric Spring," 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, India, 2018, pp. 1-4, doi: 10.1109/ICETIETR.2018.8529109.
6. A. M. Tayade, V. P. Dhote and A. G. Thosar, "Demand Side Management and Voltage Regulation in Microgrid Using Electric Spring," 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, India, 2018, pp. 1-4, doi: 10.1109/ICETIETR.2018.8529109.
7. G. Rathod, A. G. Thosar, V. P. Dhote and R. Zalke, "PM Synchronous Motor Drive for Electric Vehicles by Using an Adaptive Controller," 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, India, 2018, pp. 1-5, doi: 10.1109/ICETIETR.2018.8529029.
8. A. Jahagirdar, A. Thosar and V. P. Dhote, "Design and Analysis of High Voltage Inductive Voltage Transformer," 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Ernakulam, India, 2018, pp. 1-4, doi: 10.1109/ICETIETR.2018.8529079.
9. V. P. Dhote, M. M. Lokhande, A. Agrawal and B. H. Kumar, "Mechanical coupling of two induction motor drives for the applications of an electric-drive vehicle system," 2017 National Power Electronics Conference (NPEC), Pune, India, 2017, pp. 330-333, doi: 10.1109/NPEC.2017.8310480.
10. S.N. Huse, R.D. Kale, & V.P. Dhote, "Development of Smart Water Supply System for University Water Supply Through Automation and Real-Time Operations." J. Inst. Eng. India Ser. B 101, 497–510 (2020). <https://doi.org/10.1007/s40031-020-00459-4>
11. V.P. Dhote, M.M. Lokhande, S.C. Gupta, "Identification of high-power density source requirement for electric vehicle during on-road conditions," Energy Reports, Volume 9, Supplement 10, 2023, Pages 533-541, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2023.05.140>

12. Dhote V.P., Lokhande M.M., Gupta S.C., Test bench setup for emulating electric vehicle on-road conditions, Energy Reports, Volume 9, Supplement 10, 2023, Pages 218-227, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2023.05.145>.
13. Dhote V. P., Makarand M. Lokhande, and Obulapathi Balapanuru. "Selection of power sharing factor for hybrid battery/ultracapacitor energy storage-based EV through load emulation technique." International Journal of Circuit Theory and Applications 52, no. 3 (2024): 1568-1586. <https://doi.org/10.1002/cta.3836>





## **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, working on computers. 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. 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. 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	

### **Publication in last five years:**

1. Supriya Pandarge, V.R. Ratnaparkhe, "Image Processing based Classification of Red Blood Cells", International Conference on Intelligent Computing and Control Systems, Vaigai College of Engineering, Madurai, Tamil Nadu, 15-17 May 2019
2. Vishal Hadolitkar, V.R. Ratnaparkhe, "Optimization of MFCC parameters for mobile phone recognition from audio recordings", Proceedings of the Third International conference on Electronics Communication and Aerospace Technology, 2019
3. Archana Ekbote, V.R. Ratnaparkhe, "Genetic Syndrome Identification: An Image Processing Approach", IETE Journal of Research, 29 May 2019
4. Snehal Patil, V.R. Ratnaparkhe, "CAN Protocol – Application in Automation Electronics", Virtual International Conference on Smart Innovation in Design, Management, Planning and Computing, MGM University, J.N.E.C. Aurangabad

5. PrajktaSadgir, 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
6. PrajktaSadgir, 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.Envirion July 2020
7. PrajktaSadgir, 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
8. Sujata Suryavanshi, V.R. Ratnaparkhe, "Age and Gender Detection using Image Processing", International Journal for Research in Engineering Application & Management, <http://www/ijream.org> November 2021
9. SumedhaBorde, 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
10. SumedhaBorde, 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
11. 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
12. 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
13. SumedhaBorde, V.R. Ratnaparkhe, "LSTM based Electro encephalography Analysis for Sleep Disorder , Subjects", International Journal of Applied Pattern Recognition, Inderscience Publishers, \_\_\_\_\_
14. 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

15. Shital B Gundre, Varsha .R. Ratnaparkhe, “Simple and flexible structure of dual band monopole wearable patch antenna ”, PCEMS 2022, VNIT Nagpur.
16. Shital B Gundre, Varsha .R. Ratnaparkhe, “Simple square shape electromagnetic band gap structure for wearable antenna”, PCEMS 2023, VNIT Nagpur



## **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>



### **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 (IJS DR), 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.



**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>	6	7
<i>Citations</i>	24	18
<i>H Index</i>	2	1
<i>I 10 Index</i>	1	

**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. Jasleen Uikey , shital B. Gundre, “Circular patch antenna comparison and performance measurement based on two different substrates”, International Journal of analytical and experimental modal analysis (IJAEMA), volume XII, issue XII december-2020.
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.



# CSE

Department



**Sudhir Gundappa Shikalpure**  
M Tech. (Computer Engineering)  
Assistance Professor

<i>Credentials</i>	<i>Google Scholar</i>
<i>Number of Publications till date</i>	15
<i>Citations</i>	9
<i>H Index</i>	2

### Publication in last five years:

1. Rajshree R Kale, S.G.Shikalpure, “ OPTIMIZING CONTENT DELIVERY NETWORK USING PROFIT MAXIMIZATION SCHEME”, IJRECE VOL. 8 ISSUE 4 OCT-DEC. 2020 ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281
2. Prachi D. Waghmare, S.G.Shikalpure, “ NETWORK ANOMALIES CLASSIFICATION USING BIASED CLASSIFIER WITH KERNEL-BASED STRATEGIES “ , IJRECE VOL. 8 ISSUE 4 OCT-DEC. 2020 ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281
3. Anuja A. Ubale , S.G.Shikalpure ,” Colon Cancer Biopsy Image Analysis using Deep Learning”, International Journal of Recent Technology and Engineering (IJRTE), ISSN:2277-3878, PP: 5694-5697 | Volume-8 Issue-2, July 2019
4. PRATIBHA SAHEBRAO SABALE, S.G.Shikalpure, “FREQUENT ITEM SET MINING USING PFP GROWTH THROUGH TRANSACTION SPLITTING”, International Journal of Advances in Electronics and Computer Science , 2018, India
5. Seema Gaikwad, S.G.Shikalpure, “Forecasting Diabetes Mellitus at an Initial Stage using Machine Learning Methods”, International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0056





**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:**

1. 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.
2. 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.
3. 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.
4. 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](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/ijcds/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 1-2February 2019.

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.



**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 Science [this link is disabled](#), 2021, 1380, pp. 308–317
5. A Review on BERT and Its Implementation in Various NLP Tasks Vrishali 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<sup>1, \*</sup>, Sharvari C. Tamane<sup>2</sup>, 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



**Arjumand. M. Khan**  
ME.(Computer Science &  
Engineering)  
Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>
<i>Number of Publications till date</i>	10
<i>Citations</i>	4
<i>H Index</i>	1
<i>I 10 Index</i>	0

### Publication in last five years:

1. Arjumand Masood Khan, Dr. Rahat Afreen Dr. Meghana Nagori Archana Ekbote, V. Ratnaparkhe, “ Text analytics on different corpus data for Multilingual System) International Journal Of Science & management (IJSEM) Vol 3, Issue 2, February 2 2018.
2. Arjumand Masood Khan, Dr. Rahat Afreen, “An Approach to Text Analytics and Text Mining in Multilingual Natural Language Processing ”, AICTE Sponsored International Conference on Advances in Communications, Computing and Embedded Systems, (ISBN 13:978-81-930222-9-0) September 2020
3. Pankaj Sahebrao Umate, Arjumand Masood Khan ,Abdul Samad Shaikh, “Study of Role and Issues of RFID in Stock”, 2019 IJRAR June 2019, Volume 6, Issue 2 [www.ijrar.org](http://www.ijrar.org) (E-ISSN 2348-1269, P- ISSN 2349-5138)
4. Arjumand Masood Khan, Mrunal Mule, “English To Marathi Translation Using Neural Network With Attention Mechanism” in Dogo Rangsang Research Journal : ISSN 2347-7180 Vol. 11, Issue. 11, No. 01, November: 2021

5. Dhanashree Shyam Bendarkar, Pratiksha Appasaheb Somase, Preety Kalyansingh Rebari, Renuka Ramkrishna Paturkar, Arjumand Masood Khan, “Web Based Recognition and Translation of American Sign Language with CNN and RNN, International Journal of Online and Biomedical Engineering , iJOE – Vol. 17, No. 01, 2021
6. Shubham Damodar Potphode. Prof. Arjumand masood khan, “Fraud Detection Of Credit Card Using Machine Learning “PARIPEX - INDIAN JOURNAL OF RESEARCH | Volume - 11 | Issue - 08 |August - 2022 | PRINT ISSN No. 2250 - 1991 | DOI : 10.36106/paripex
7. Rutuja Madhukar Kale<sup>1</sup>, Asst Prof. Arjumand Masood Khan<sup>2</sup> “DENTAL CARIES DETECTION AND CLASSIFICATION USING CONVOLUTIONAL NEURAL NETWORK<sup>2024</sup> IJCRT | Volume 12, Issue 4 April 2024 | ISSN: 2320-2882
8. Rutuja Madhukar Kale<sup>1</sup>, Asst Prof. Arjumand Masood Khan<sup>2</sup> “Dental Caries Detection using Convolutional Neural Network: A review” Vol.14 / Issue 82 / Feb / 2024 International Bimonthly (Print) – Open Access ISSN: 0976 – 0997



## **Prashant D Pathak**

ME. (Computer Science &  
Engineering)

Pursuing Ph.D. project: Biometrics  
Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>
<i>Number of Publications till date</i>	3
<i>Citations</i>	38
<i>H Index</i>	2
<i>I 10 Index</i>	2

### **Publication in last five years:**

1. K Wadkar, P Pathak, N Wagh, "Breast cancer detection using ANN network and performance analysis with SVM", International journal of computer engineering and technology 10 (3), 75-86
2. VJ Pawar, KD Kharat, SR Pardeshi, PD Pathak, "Lung cancer detection system using image processing and machine learning techniques", Cancer 3 (2020), 4
3. KC Jaiswal, PD Pathak, VJ Pawar, KD Kharat, "Prediction of Degree Student Achievement Analysis", IOP Conference Series: Materials Science and Engineering 1070 (1), 012057





## **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

KNOWLEDGE IS POWER... IF APPLIED

IT

Department



### **Dr. Chitra Gaikwad**

Ph.D. (Computer Science and Engineering)

Ph. D. Topic: Mapping of Soil Material using  
Remote Sensing

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	20	5
<i>Citations</i>	20	2
<i>H Index</i>	3	1
<i>I 10 Index</i>	0	

### **Publication in last five years:**

1. Mrs. Chitra. M. Gaikwad, Prof. Dr. S. N. Kakarwal; Analysis of Soil using Spectral Signatures, International Journal of Engineering Research in Computer Science and Engineering (IJERCSE),4,Issue 10,130-133,2017,IJERCSE
2. Ghule Anjana; Deshmukh R R; Gaikwad Chitra; MFDS-m red edge position detection algorithm for discrimination between healthy and unhealthy vegetable plants, Recent Trends in Image Processing and Pattern Recognition: Second International Conference, RTIP2R 2018, Solapur, India, December 21–22, 2018, Revised Selected Papers, Part III 2,372-379,2019,Springer Singapore
3. Gaikwad Chitra M; Kakarwal Sangeeta N; Use of Spectral Reflectance for Sensitive Waveband Determination for Soil Contents, Recent Trends in Image Processing and Pattern Recognition: Second International Conference, RTIP2R 2018, Solapur, India, December 21–22, 2018, Revised Selected Papers, Part III 2,323-328,2019, Springer Singapore

4. Mrs. Chitra. M. Gaikwad, Prof. Dr. S. N. Kakarwal, Mrs. A. N. Ghule, Prof. Dr. R. R. Deshmukh, Dr. D. V. Kurmude; Use Of Spectral Reflectance For Sensitive Waveband Determination For Soil Organic Matter, International Journal Of Scientific & Technology Research,8,Issue 10,1071-1075,2019,IJSTR©2019
5. Tanishq More, Rutuja Lahoti, Varsha. P. Gaikwad, Chitra. M. Gaikwad; Development of an Alternative Energy Harnessing System using the Piezoelectric Effect, International Journal for Research in Applied Science & Engineering Technology (IJRASET),8,3,1006 - 1009,2020,International Journal for Research in Applied Science & Engineering
6. Chitra M Gaikwad, Sangeeta N Kakarwal, Shubhangi Sapkal, Nilesh Uke, Estimation of Soil Attributes using Spectroscopy, CSI Journal of Computing, Vol. No. 3, No. 2, April 2020 - June 2020, R3: 12 -16
7. Ghule Anjana; Deshmukh R R; Gaikwad Chitra; Distinguishing Healthy and Infected Vegetable Crops using Hyperspectral Leaf Reflectance, CSI Journal of Computing, Vol. No. 3, No. 2, April 2020 - June 2020,
8. Ghule Anjana N; Deshmukh R R; Gaikwad Chitra M; Discrimination Between Healthy And Damaged Sesame Leaves Using Hyperspectral Data
9. Anjana Ghule; Deshmukh R R; Abbasov I B; Gaikwad Chitra; Spectral Discrimination of Healthy And Infected Vegetable Plants Using Non Imaging Hyperspectral Data, 2020,117-125,2020
10. Chaudhary Seema; Kakarwal Sangeeta; Gaikwad Chitra; Feature Selection: Filter Methods for Classification of Indian Musical Instruments, "Proceedings of the International Conference on Data Science, Machine Learning and Artificial Intelligence,136-139,2021
11. Sangeeta N Kakarwal, Chitra M Gaikwad, Classification based on soil attributes using non-imagery spectroscopic data, 3rd International Conference on Intelligent System, Cognitive Science and Knowledge Engineering (ICKE2023)





### **Ms. Komal Gandle**

ME(Computer Science Engineering)

Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	8	2
<i>Citations</i>	5	3
<i>H Index</i>	1	1
<i>I 10 Index</i>	0	

### **Publication in last five years:**

1. Vilas S. Gaikwad; Komal S. Gandle,“ Ideal complexity cryptosystem with high privacy data service for cloud databases”,Graphics, IEEE Journal, INSPEC Accession Number: 17411036, Electronic ISBN:978-1-5090-4264-7Print on Demand(PoD), Aurangabad, India, 30 November 2017
2. Vilas S. Gaikwad; Komal S. Gandle,“ Investigation of a High Performance Scheduling Algorithm for Cloud Computing System”, IEEE Xplore, International conference on Internet of things, Next Generation Networks and cloud Computing(ICINC)2017. Sinhgad Institutes, Pune India. 17/02/2017 to 18/02/2017.
3. Vilas S. Gaikwad; Komal S. Gandle,“ Building the next generation of Cyber Security Expert Strategies and Policies” International conference on Recent Innovations in Engineering and Technology-19 IEEE Xplore Pune, India, 15/02/2019 to 16/02/2019.
4. Vilas S. Gaikwad; Komal S. Gandle,“ Efficient segmentation and Classification method for Intraductal Breast Lesions” 2 ND International conference on Recent Innovations in Engineering and Technology-2020 Pune, India, 30/01/2020 to 31/01/2020

5. Yogesh H. Bhosale; Vilas S. Gaikwad; Komal S. Gandle,” Human Monkeypox 2022 Virus: Machine Learning Prediction Model, Outbreak Forecasting, Visualization with Time-Series Exploratory Data Analysis” IEEE Xplore, Kharagpur, India, 26 December 2022.
6. Nihar M Ranjan, Sunil D Kale, Vilas S Gaikwad, Komal Gandle, “Text Document Categorization and Semantic Text Analytics: A Neural Network Approach”, Grenze International Journal of Engineering and Technology, Jan Issue, Grenze ID: 01.GIJET.9.1.522\_3 © Grenze Scientific Society, (Scopes) 2023
7. Vilas S Gaikwad, Komal Gandle, “EHSCO-Deep Residual Network: Elephant Herding Sine Cosine Optimization-based Deep Residual network for Diabetic Retinopathy Detection” International Journal, Resbee Publishers Journal of Networking and Communication Systems (Scopes), Volume 5 | Issue 3 | July 2022, ISSN:2582-3817, 20/07/2022



### **Dr. Anjana N Ghule**

Head and Assistant Professor, Department  
of Information Technology

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	–	–
<i>Citations</i>	13	15
<i>H Index</i>	2	2
<i>I 10 Index</i>	0	

## Papers published in National/International Journals

1. Anjana Ghule, R. R. Deshmukh (March 2021), Wavelength Selection and Classification of Hyperspectral Non-Imagery Data to Discriminate Healthy and Unhealthy Vegetable Leaves, Current Science, 120(5), pp.932-936, DOI: <https://doi.org/10.18520/cs/v120/i5/932-936> Scopus, Web of Science, SCI Exted.
2. Ghule, A. N., Prof., D. R. R. D., & Gaikwad, C. M. (2021b). Discrimination between Healthy and Damaged Sesame Leaves using Hyperspectral Data. Indian Journal of Computer Science and Engineering, 12(2), 428–433. <https://doi.org/10.21817/indjcse/2021/v12i2/211202146> , Scopus
3. Anjana Ghule, R. R. Deshmukh, Chitra Gaikwad (June 2020) Distinguishing Healthy and Infected Vegetable Crops using Hyperspectral Leaf Reflectance, CSI Journal of Computing, Vol.No.3(2)
4. Sanket Godbole, Hrishikesh Janjal, Devendra Pawar, Sourav Kanade, Anjana Ghule, Performance of Keras on Indian Traffic Signal Classification and Recognition, Journal International Research Journal of Engineering and Technology IRJET May 2020, Vol 07 , Issue 5 No e ISSN: 2395-0056 p ISSN:2395-0075

## Papers published in National/International Conference

1. Anjana Ghule, R. R. Deshmukh, Pooja Janse (2018) ,Hyperspectral Remote Sensing for the Study of Characteristics of Crops, Conference: 2nd International Conference on Cognitive Knowledge Engineering
2. Anjana Ghule, R. R. Deshmukh, Abbasov Iftikhar Balakishievich, Chitra Gaikwad (June 2020) , Spectral Discrimination of Healthy and Infected Vegetable Plants using Non Imaging Hyperspectral Data, Computer and Information Technologies in science, engineering and management , Comtech2020, pp.92-99 numbers). Rostov-on-Don Taganrog Publishing House of the Southern Federal University, 2020.

## Papers published in Book chapter

1. Chapter on Anomaly detection using Semi supervised learning for sericulture Cocoon Production by Kavita Bhosle, Anjana Ghule, S. R. Chaudhary, Computer Vision and Information Technology Advances and Applications, I. K. International Publishing House Pvt. Ltd. New Delhi, ISBN number :978-93-80026-95-4, Page 850-855
2. Ghule A., Deshmukh R.R., Gaikwad C. (2019) MFDS-m Red Edge Position Detection Algorithm for Discrimination Between Healthy and Unhealthy Vegetable Plants. In: Santosh K., Hegadi R. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2018. Communications in Computer and Information Science, vol 1037. Springer, Singapore. [https://doi.org/10.1007/978-981-13-9187-3\\_33](https://doi.org/10.1007/978-981-13-9187-3_33) Scopus (Springer)
3. Ghule A., Deshmukh R.R. (2020) Improved Linear Extrapolation Technique for Crop Health Monitoring Using Hyperspectral Data. In: Bansal J., Gupta M., Sharma H., Agarwal B. (eds) Communication and Intelligent Systems. ICCIS 2019. Lecture Notes in Networks and Systems, vol 120. Springer, Singapore. [https://doi.org/10.1007/978-981-15-3325-9\\_8](https://doi.org/10.1007/978-981-15-3325-9_8) Scopus (Springer)



## Book Published

1. Cyber Security and Ethical Hacking. Dr. Manoj Eknath Patil, Dr. Anjana N. Ghule, Prof. Bhushan B. Shaharkar and Prof. Anand Magar. ISBN 978-93-5757-357-3

## Copyright

1. A TOOL FOR FINDING RED EDGE POSITION AND SPECTRAL FEATURES USING HYPERSPECTRAL DATA, SW-14635/2021 ANJANA N. GHULE , PROF. DR. R. R. DESHMUKH

## List of Courses Taught/Teaching at UG/ PG level

- Computer Networks
- Cryptography and Network Security
- Data Mining
- Theory of Computation
- Mobile Computing
- Principles of Compiler Design
- Data Structures
- System Programming
- Programming in Java

## List of Courses Taught/Teaching at PG level

- Advanced Data mining
- Advanced Computer Networks



### **Dr. Sangita Nemade**

Ph.D. (Computer Science and Engineering)

Ph.D. project: Semantic Image Annotation

Using Deep Learning

Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	7	7
<i>Citations</i>	29	29
<i>H Index</i>	7	4
<i>I 10 Index</i>	4	

### IPR :

1. Handy Device and Process for Non Destructive identification of Devgad Alphonso mango and its Ripening Percentage
2. NON-DESTRUCTIVE METHOD FOR GENERATING DESCRIPTION OF MANGO AND DEVICE THERE OF)

### Publication in last five years:

1. Nemade, S.B. and Sonavane, S.P., Image segmentation using convolutional neural network for image annotation. In 2019 International Conference on Communication and Electronics Systems (ICCES) (pp. 838-843). IEEE, July 2019.
2. Nemade, S.B. and Sonavane, S.P., Automatic feature extraction for CBIR and image annotation applications. In Computing in Engineering and Technology: Proceedings of ICCET 2019 (pp. 557-566) 2020. Springer Singapore.

3. Salankar, N., Nemade, S.B. and Gaikwad, V.P., Classification of seizure and seizure free EEG signals using optimal mother wavelet and relative power. Indonesian Journal of Electrical Engineering and Computer Science (IJEECS), 20(1), pp.197-205 2020.
4. Nemade, S. and Sonavane, S., Comparative analysis of geometric transformation effects for image annotation using various CNN models. In Applied Computer Vision and Image Processing: Proceedings of ICCET 2020, Volume 1 (pp. 362-369) 2020. Springer Singapore.
5. Ajmera, F., Meshram, S., Nemade, S. and Gaikwad, V., Survey on object detection in aerial imagery. In 2021 Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV) (pp. 1050-1055) February 2021. IEEE.
6. Nemade, S.B. and Sonavane, S.P., Co-occurrence patterns based fruit quality detection for hierarchical fruit image annotation. Journal of King Saud University-Computer and Information Sciences, 34(7), pp.4592-4606 2022.
7. Nemade, S.B. and Sonavane, S.P., Semantic segmentation using GSAUNet. ICT Express, 9(1), pp.1-7 2023.



## **Dr. Shilpa Kabra (Laddha)**

Ph.D. (Computer Science & Engineering)  
Thesis: Semantically Enhanced Information  
Retrieval using Ontology  
Assistant Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	20	14
<i>Citations</i>	100	45
<i>H Index</i>	6	4
<i>I 10 Index</i>	4	

### **IPR in last five years:**

#### **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

### **Publication in last five years:**

#### **Books:**

1. Anuradha Thakare, Shilpa Laddha and Ambika Pawar “Hybrid Intelligent Systems for Information Retrieval” ISBN: 97-8-1003-1879-74 November 2022, CRC Press, New York
2. Mangesh Ghonge, Shilpa Laddha and Pallavi Chavan “Semantic Intelligent Computing and Applications” ISBN: 97-8-3110-7816-63 July 2023, De Gruyter, Berlin, Germany



3. Shilpa Laddha "Consumer Loan Credit Risk Analyser Using Neural Networks" ISBN:978- 3-3460- 8366-1, November 2019
4. Shilpa Laddha "Smart Risk Analyst: A Neural Networks Approach "ISBN:978-1-6467-8518-6, October 2019

#### Research Papers:

5. Satish Salunkhe, Shilpa Laddha, "Portable Healthcare Computing and Clinical Decision Support System Enabled by Artificial Intelligence" International Journal of Engineering Systems Modelling and Simulation (IJESMS) InderScience Vol. 13/3 DOI: 10.1504/IJESMS.2022.123955 ISSN: 1755-9758 pp 228-233, 2022
6. Mayur Jadhav, Shilpa Laddha, Sanchit Kabra, "Necessity of Self-Explainability in AI : Insights from the existing Social Projects", Springer 'Next Generation Systems and Networks', by Bansal, Ajmera, Joshi, 'Lecture Notes in Networks and Systems', Vol 641. ISBN: 978-981-99-0483-9, ISSN: 2367-3389, 2023
7. Shilpa Laddha, Pradip Jawandhiya, "Onto Semantic Indian Tourism Information Retrieval System" Springer' Recent Studies on Computational Intelligence', by Khanna, Singh, Abhishek, 'Studies in Computational Intelligence', Vol 921. DOI: 10.1007/978-981-15- 8469-5\_1, ISBN: 978-981-15-8469-5, ISSN: 1860-9503 pp 1-18, 2020
8. Shilpa Laddha, Pradip Jawandhiya, "Novel Concept of Spelling Correction for Semantic Tourism Search Interface" Springer 'Information and Communication Technology for Sustainable Development', by Tuba, Akashe, Joshi(Eds.) Advances in Intelligent Systems and Computing Vol 933. DOI:10.1007/978-981-13-7166- 0\_2, ISBN: 978-981-13-7166-0, ISSN: 2194-5357 pp 13-21, 2020
9. D. VijendraBabu, Shilpa Laddha, "Visual Exploration of Fault Detection using Machine Learning and Image Processing" International Journal of Engineering Systems Modelling and Simulation (IJESMS) InderScience; Vol. 14, DOI:/10.1504/IJESMS.2023.127394 pp 8-15, 2022

10. C. Karthikeyan, Shilpa Laddha, "Deep Learning-Based Video Coding Optimization of H.265" International Journal of Engineering Systems Modelling and Simulation (IJESMS) InderScience; Vol. 14, DOI:/10.1504/IJESMS.2023.127392 pp 52-57, 2022
11. Shilpa Laddha, Pradip Jawandhiya "Novel Concept of Query Similarity and MetaProcessor for Semantic Search" In: Springer Book 'Advances in Computer Communication and Computational Sciences' by Bhatia S.K., Tiwari S.T., (eds) 2019. Advances in Intelligent Systems and Computing. Vol 760. Springer, Singapore. DOI: 10.1007/978-981-13-0344-9\_9, ISBN: 978-981-13-0344-9, ISSN: 2194-5357 Pages 111- 120



## **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>	20	7
<i>Citations</i>	20	5
<i>H Index</i>	3	1
<i>I 10 Index</i>	0	

### **IPR :**

#### **Patents:**

1. 01. Profile Based Mapping Social Media Sentiments Using Cloud Cluster Security and Deep Learning.
2. Application no: 202041031966, Application type-ordinary, Date of filling-27-07-2020, Field of invention: Computer Science, Publication date: 21-08-2020.
3. 02. 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.
4. 03. AI-Enabled Oral Cancer Detection Device using deep learning(In Process)

#### **Copyrights:**

1. Diary no: 1455/2020-CO/L, Literacy/dramatic, "Cloud cluster security policy using datacrypt based on ontology
2. Diary no: 26579/2022-CO/L, Literacy/dramatic" Face Recognition Bot" (In Process)



## 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 Lines", 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
8. R Mahajan, S Chavan, DA Ajalkar, B SV, PA Khadkikar A secure authentication protocol for healthcare service in IoT with Q-net based secret key generation ,Web Intelligence 21 (4), 407-433,2023.
9. Rupali A. Mahajan , Smita Chavan , Prajakta Ajay Khadkikar ,"Design and development of Internet of Things and artificial intelligence-based medical imaging system"Book Chapter,2023.

10. Dr. Vikul Pawar, Aditya Sharma , Dr. Suraj Pardeshi , Dr. Satish Bhalshankar,"Deep Learning Based Diabetic Retinopathy Disease Classification in Fundus Photographic Images" Journal For Basic Sciences,2024.
11. Dr.Smita Chavan, Dr. Vikul Pawar, Aditya Sharma , Dr. Suraj Pardeshi , Dr. Satish Bhalshankar,"EXPLORING RADIOMICS DATASETS FOR BRAIN TUMOR DIAGNOSIS USING DATA MINING TECHNIQUES,2024.
12. 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: 10123407,2024.
13. Dr. Suraj Pardeshi1, Dr. Satish Bhalshankar, Dr. Kailash Kharat , Dr. Vikul Pawar, Dr. Smita Chavan, Dr. Rasika Kulkarni," XERCISING CONVOLUTIONAL NEURAL NETWORK BASED TECHNIQUES FOR DETECTING INDOOR OBJECTS TO ASSIST VISUALLY IMPAIRED INDIVIDUALS", Journal of Engineering and Technology Management 73 (2024) ,2024.



## **Varsha Prabhakar Gaikwad**

Ph.D in Computer Engineering

Ph.D. project: Plant disease detection by  
leaf classification using deep learning

Associate Professor

<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<i>Number of Publications till date</i>	22	4
<i>Citations</i>	64	2
<i>H Index</i>	3	1
<i>I 10 Index</i>	1	

### **Publication in last five years:**

1. Varsha P. Gaikwad, Vijaya Musande ” Plant Leaf Damage Detection Based On Colour And Texture Using Deep Learning – ALEXNET”, Solid State Technology ,Volume 63, Issue:2, Publication year 2020 ISSN: 0038111X Copyright 2020 SERSC
2. Varsha P. Gaikwad, Vijaya Musande “Potato Plant leaf disease detection using CNN model”, European Chemical Bulletin ISSN: 2063-5346, March 2023
3. Varsha P. Gaikwad, Vijaya Musande “EFFECTIVE PREDICTION OF CROP DISEASES USING CETA-LATRAN OPTIMIZATION BASED DEEP KNN IN MULTISPECTRAL IMAGES”, International information and Engineering Technology Association Traitement du Signal, April 2023

4. Varsha P. Gaikwad, Vijaya Musande, “Leaf Disease Detection Using Deep Learning: A Review”, IX Conference of Multidisciplinary Research(IEI Chandigarh) Institution of Engineers, India, Chandigarh, ISBN978-81-943584-6-6, 21st December 2019, [http://proceeding.conferenceworld.in/IX\\_ICMR/17Cpyt398vos7C518.pdf](http://proceeding.conferenceworld.in/IX_ICMR/17Cpyt398vos7C518.pdf)
5. Varsha P. Gaikwad, Vijaya Musande,” 2nd International Conference on Recent Development in Engineering, Sciences, Humanities, and Management [ESHM-2023] ”, <http://proceeding.conferenceworld.in/ESHM-2023/1818032023BH433.pdf>
6. Nilima Salankar, Sangita Nemade, Varsha Gaikwad,” Classification of seizure and seizure free EEG signals using optimal mother wavelet and relative power”, Indonesian Journal of Electrical Engineering and Computer Science Vol. 20, No. 1, October 2020, pp. 197-205 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v20.i1.pp197-205
7. Varsha Gaikwad, Bhushan Yelure, Arun Patokar, Siddheshwar Patil, Rajesh Mawale, Sangita Nemade, Impact and Analysis of Attacks on Routing Protocols in Vehicular Ad hoc Network (VANET): Assessing Security Threats pp.294-302 , ISSN 2287-5255 , 2024 <https://doi.org/10.5573/IEIESPC.2024.13.3.294>



70

69

68

# MCA

Department







### **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 (IJSDR), 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



### **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. 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.
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of Applied Science

# Science

Department



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<i>Credentials</i>	<i>Google Scholar</i>	<i>Scopus</i>
<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	

## Publications:

1. Another suggestion for an interstellar C<sub>5</sub>H<sub>2</sub> search S. Chandra, P.G. Musrif, S.V. Shinde and S.A. Shinde *New Astronomy*, 11, 166, (2005).
2. Anomalous absorption in H<sub>2</sub>CO molecule S. Chandra, P.G. Musrif, S.V. Shinde *Bull. Astr. Soc. India*, 34, 11, (2006).
3. Anomalous absorption in c-C<sub>3</sub>H and c-C<sub>3</sub>D radicals S. Chandra, S.V. Shinde, W.H. Kegel and E. Sedlmayr *Astron Astrophys*, 467, 371, (2007).
4. Anomalous absorption in rhomboidal SiC<sub>3</sub> molecule S. Chandra and S.V. Shinde *Bull. Astr. Soc. India*, 36, 55, (2008).
5. Anomalous absorption in H<sub>2</sub>CN and CH<sub>2</sub>CN molecules S. Chandra and S.V. Shinde *Pramana*, 71, 23, (2008).

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