

MKSSS'S Cummins College of Engineering for Women, Pune
Electronics and Telecommunication Engineering Department

2013-2014 to 2024-2025

INDEX

Sr. No	Contents
1	International Journal - SCI / SCOPUS Indexed
2	National / International Journal Non-Scopus Indexed
3	National/ International Scopus Indexed Conferences
4	National/ International Non-Scopus Indexed Conferences
5	Books
6	Books Chapters

International Journal - SCI / SCOPUS Indexed

A.Y. 2024 - 2025

- [1] Prachi Waghmare, "Techniques for Generating Sign Language a Comprehensive Review", *Journal of The In Ms. Bhakti Kadam, Dr. Ashwini M. Deshpande stitution of Engineers (India) Series B*, July 2024 (SCOPUS)
- [2] Bhakti Kadam, Ashwini Deshpande, "Query-attentive video summarization: a comprehensive review", *Multimedia Tools and Applications*, August 2024 <https://doi.org/10.1007/s11042-024-19977-0> (SCOPUS)
- [3] Sharada Ohatkar, Ratnaprabha Borhade, Sheetal Barekar, Snehal Ghodake Nichale, Ravindra Borhad , "Quantum Computing Techniques for Numerical Linear Algebra in Computational Mathematics" *Panamerican Mathematical Journal*, September 2024 (SCOPUS)
- [4] Sandeep Musale, Ravikant Suryawanshi, Snehal Bhosale, "Mathematical Analysis of Neural Networks for Signal Processing", *Advances in Nonlinear Variational Inequalities* September 2024 <https://drive.google.com/file/d/1qDPsma8U> (SCOPUS)
- [5] Ratnaprabha Borhade, Sheetal Barekar, Sharada Ohatkar, Piyush K. Mathurkar, Ravindra Borhade, Pushpa Bangare, "ResneXt-Lenet: A hybrid deep learning for epileptic seizure prediction", *Intelligent Decision Technologies*, September 2024 https://drive.google.com/drive/folders/1Hgw_j7qRC0dOscTcmgNsmSwNiIurC1y (ESCI)
- [6] Leena Mehta, Megha Borse, Meenal Tepan, Janhavi Shah "Identifying Suitable Deep Learning Approaches for Dental Caries Detection Using Smartphone Imaging", *International Journal of Computational Methods and Experimental Measurements*,

September 2024 <https://doi.org/10.18280/ijcmem.120306> (SCOPUS)

- [7] Ratnaprabha Borhade, Shilpa Pant, Sharada Ohatkar, Pushpa Bangare, Ravindra Borhade “AI-Enhanced Predictive Analytics for Proactive Healthcare Management: Leveraging Machine Learning to Improve Patient Care and Operational Efficiency”, *Panamerican Mathematical Journal* October 2024 <https://internationalpubs.com/index.php/pmj/article/view/2096/1317> (SCOPUS)
- [8] Maitreyi Joglekar, Ashwini Deshpande, “A comprehensive experimental evaluation of remote sensing hyperspectral image denoising methods for mixed noise”, *AIP Proceedings Volume 3156, Issue 1*, October 2024 <https://doi.org/10.1063/5.0227626> (SCOPUS)
- [9] Prachi Waghmare, Ashwini Deshpande, “Enhanced BERT-based Multi-Head Self-Attention Transformer for Transformation of Marathi Text to Marathi Sign Language Gloss”, *ACM Transactions on Asian and Low-Resource Language Information Processing* October 2024 <https://doi.org/10.1145/3687304> (SCIE)
- [10] Minakshee Patil, Prachi Mukherji, Vijay Wadhai, “Federated learning and deep learning framework for MRI image and speech signal-based multi-modal depression detection”, *Computational Biology and Chemistry*, December 2024 <https://doi.org/10.1016/j.compbiolchem.2024.108232> (SCIE)
- [11] Bhakti Kadam, Ashwini M. Deshpande, “Leveraging 3D convolutional networks for effective video”, *Indonesian Journal of Electrical Engineering and Computer Science* March 2025 DOI 10.11591/ijeecs.v37.i3.pp1616-1625 (SCOPUS)
- [12] Bhakti Kadam, Ashwini M. Deshpande, “Multi-head attention with reinforcement learning for supervised video”, *Journal of Electronic Imaging*, Sep 2024 <https://doi.org/10.1117/1.JEI.33.5.053010> (SCOPUS)

A. Y. 2023 - 2024

- [1] M. R. Veeramanickam, R. Borhade, “Smart education system to improve the learning system with CBR based recommendation system using IoT”, *Heliyon*, 3 Jul. 2023, Vol. 9, Iss.7, DOI:<https://doi.org/10.1016/j.heliyon.2023.e17863>
- [2] S. Musale, V. Gulavani, K. Gargate, S. Kadam, S. Kothawade, “Indian Sign Language Recognition and Search result”, *Journal of Autonomous Intelligence*, Vol. 6, Iss. 3 Aug. 2023, DOI: <https://doi.org/10.32629/jai.v6i3.1000>
- [3] A. Deshpande, E. Priyadarshini, A. More, S. Pate, “A new framework for accessing and visualizing Ocean Color Data for Water quality parameter analysis”, *Journal of Integrated Science and Technology*, Vol. 12, Iss. 1, Aug. 2023, DOI: <https://pubs.thesciencein.org/journal/index.php/jist/article/view/a707>
- [4] J. Rangole, S. Mangale, S. Morkhade, “Analysis of Surface Sediment at Tropical Freshwater Lake Using SONAR System with Field Validation”, *Springer, Journal of The Institution of Engineers (India): Series A*, Aug. 2023, DOI: <https://doi.org/10.1007/s40030-023-00752-7>

- [5] K. Ghorpade/Joshi, A. Khaparde, "Single-Channel Speech Enhancement by Particle Swarm Optimization-Gravitational Search Algorithm with HRNR", *Bulletin of Electrical Engineering and Informatics*, Vol. 12, No. 5, Oct. 2023, 2302-9285, DOI: 10.11591/eei.v12i5.5373
- [6] A. Khedkar, S. Musale, G. Padalkar, R. Suryawanshi, S. Sahare, "An Overview of 5G and 6G Networks from the Perspective of AI Applications", *Journal of Institution of Engineers India*, Nov. 2023, DOI: <https://link.springer.com/article/10.1007/s40031-023-00928-6>
- [7] S. Sahare, A. Khedkar, S. Musale, "Performance evaluation of KPCA pre-imaging methods for speech signal Denoising", *Journal of Autonomous Intelligence (2024)*, Vol. 7 Iss. 1, Nov. 2023, DOI: <https://doi.org/10.32629/jai.v7i1.1086>
- [8] P. Waghmare, A. Deshpande, "A Study on Techniques and Challenges in Sign Language Translation", *International Journal on Recent and Innovation Trends in computing and Communication*, Vol. 11 Iss. 9, pp. 4039-4052. DOI: <https://doi.org/10.17762/ijritcc.v11i9.9765>
- [9] K. Gunale, P. Mukherji, S. Motade, "Convolutional Neural Network-Based Fall Detection for the Elderly Person Monitoring", *Journal of Advances in Information Technology*, Vol. 14, No. 6, Nov. 2023, DOI: <https://www.jait.us/uploadfile/2023/JAIT-V14N6-1169.pdf>
- [10] S. Ohatkar, "Heuristics for optimizing minimum interference channel allocation problem in cellular networks", *Journal of Integrated Science and Technology*, Vol.12, Iss. 4, Jan. 2024, DOI: <https://pubs.thesciencein.org/journal/index.php/jist/article/download/a789/515/2839>
- [11] N. Bhaskar, R. Borhade, S. Barekae, M. Bachute, V. Bairagi, "CNN-CatBoost ensemble deep learning model for enhanced disease detection and classification of kidney disease", *Indonesian Journal of Electrical Engineering and Computer Science*, Vol. 34, Mar. 2024, DOI: <http://doi.org/10.11591/ijeecs.v34.i1.pp144-151>
- [12] P. Mukherji, M. Patankar, S. Swami, S. Shinde, H. Hingmire, "Solar Panel Defect Detection in Thermal & Electroluminescence Imaging by Machine Learning and Deep Learning", *Indian Journal of Technical Education*, July 2023 ISSN 0971-3034 (UGC care)
- [13] A. Deshpande, M. Oka, S. Wattamwar, B. Zambare, "Investigation of Deep Learning Models for Automatic Building Detection from Aerial Images to Improve Performance Score", *Indian Journal of Technical Education*, Dec. 2023, ISSN 0971- 3034 (UGC Care)
- [14] Kalpana Kumbhar, Prachi Mukherji, "An optimized deep strategy for recognition and alleviation of DDoS attack in SD-IoT", *Network: Computation in Neural Systems* June 2024 <https://doi.org/10.1080/0954898X.2024.2356852> (SCI)
- [15] Ravikant Suryawanshi, Dr. S. S. Musale, Dr. Snehal A Bhosale, "Comparative Analysis of use of Machine Learning Algorithm for Prediction of Sales", *Journal of Electrical Systems* June 2024 <http://dx.doi.org/10.52783/jes.1383> (SCOPUS)

A. Y. 2022 - 2023

- [1] S. Zamani, S. Rajput, H. Kaur, "Towards Applicability of Information Communication Technologies in Automated Disease Detection", *International Journal of Next-Generation Computing (IJNGC)*, 31 Oct. 2022, Vol.13, Iss.3, ISSN:0976-5034 DOI: <https://doi.org/10.47164/ijngc.v13i3.705> (Scopus)
- [2] S.Ohatkar, A. Deshpande, "Outcome-Based Education: A Learner-Centric Pedagogical Framework with Case Studies in Digital Communication and Signal processing Courses", *JEET Journal of Engineering Education Transformations*, Jan.2023, DOI: <https://dx.doi.org/10.16920/jeet/2022/v36is1/22172https://journaleet.in/articles/outcome-based-education-a-learner-centric-pedagogical-framework-with-case-studies-in-digital-communication-and-signal-processing-courses> (Scopus)
- [3] A. Deshpande, "Project Based Learning Approach in Digital Signal Processing Course for Increasing Learners' Cognitive and Behavioral Engagement to Promote Self-Learning", *Journal of Engineering Education Transformations*, 36, Special Issue I Jan.2023, DOI: <https://www.journaleet.in/articles/project-based-learning-approach-in-digital-signal-processing-course-for-increasing-learners-cognitive-and-behavioral-engagement-to-promote-self-learning> (Scopus)
- [4] M. Rasne, B. Pathak, "Review Paper On Software Testing And Life Cycle", *YMER*, Sep. 2022, DOI: <https://ymerdigital.com/uploads/YMER210933.pdf> (Scopus)
- [5] M. Pote, P. Mukherji, A. Sonawane, "Design of 5G Microstrip patch array antenna for gain enhancement", *Journal of Integrated Science and Technology*, Vol. No. 10, 3, Nov. 2022, DOI: <https://pubs.iscience.in/journal/index.php/jist/article/view/1470> (Scopus)
- [6] M. Pathade, M. Khambete, "Recognition of Crowd Abnormal Activities using Fusion of Handcrafted and Deep Features", *Indonesian Journal of Electrical Engineering and Computer Science*, Vol. 28, Iss. 2, Nov. 2022, DOI: <http://doi.org/10.11591/ijeecs.v28.i2.pp1076-1087> (Scopus)
- [7] M. Patil, P. Mukherji, V. Wadhai, "A novel hybrid optimization algorithm for depression detection using MRI and speech signal", *Biomedical Signal Processing and Control*, Vol. 86, part A, Sep. 2023, DOI: <https://doi.org/10.1016/j.bspc.2023.105046>

A.Y. 2021-2022

- [1] M. Deshpande, S. R. Patale, S. Roy, "Removal of line striping and shot noise from remote sensing imagery using a deep neural network with post-processing for improved restoration quality," *International Journal of Remote Sensing*, vol. 42, no. 19, pp.7357-7380, August 2021. DOI: 10.1080/01431161.2021.1957512 (SCI)
- [2] A. M. Deshpande, S. Roy, "An Efficient Image Deblurring Method with a Deep Convolutional Neural Network for Satellite Imagery," *Journal of the Indian Society of Remote Sensing*, vol. 49, no. 11, September 2021, pp. 2903-2917. DOI: <https://doi.org/10.1007/s12524-021-01429-z> (SCIE and Scopus)

- [3] S. Mangale, M. Raje, N. More, S. Sinha, and M. Khambete, "Object tracking by adaptive fusion of thermal infrared and visible spectrum imaging using particle filter and structural similarity index metric," *Journal of Applied Remote Sensing*, vol. 15, no. 4, pp. 044517(1)-044517(16), November 2021. DOI: <https://doi.org/10.1117/1.JRS.15.044517> (SCIE and Scopus)
- [4] G. R. Padalkar, M. B. Khambete, "Fusion-Based Semantic Segmentation Using Deep Learning Architecture in Case of Very Small Training Dataset," *International Journal of Image and Graphics*, pp. 2250043(1)–2250043(18), November 2021. DOI: <https://doi.org/10.1142/S0219467822500437> (ESCI and Scopus)
- [5] P. Deshpande, P. Mukherji, G. Ghule, A. Ratnaparakhi, "Adaptiveness, Error Resilience and Robustness Validation of the Multimodal Hand Biometric Recognition System," *International Journal of Computing and Digital Systems*, July 2021, pp. 1-14, ISSN (2210- 142X) (Scopus)
- [6] K. Joshi, A. Khaparde, "Single Channel Speech Enhancement using Evolutionary algorithm with LOGMMSE", *ASEAN Engineering Journal*, vol. 12, no. 1, pp. 83-91, March 2022. DOI: <https://doi.org/10.11113/aej.v12.16770> (Scopus)
- [7] S. Dhande, B. Pathak, S. Kulkarni, "Development of End Node Using Stm32 and Gateway for Lorawan using ESP32 Microcontroller," *GIS Science Journal*, vol 8, no. 8, pp. 706-711, August 2021. ISSN NO : 1869-9391. (UGC Care Group 2 & Scopus Active Journal)
- [8] M. S. Borse, "3-Dimensional Reconstruction and Identification of Brain Tumor," *Dickensian Journal*, pp. 319-334, April 2022, ISSN- 0012 2440 (Scopus)

A.Y. 2020-2021

- [1] M. Pathade, M. Khambete, "Supervised Method for Congestion Detection at Entry and Exit Corridors of Public Places," *International Journal of Image and Graphics*, vol. 21, no. 1, pp. 2150019-1 to 2150019-16, October 2020. ISSN: 0219-4678. (ESCI)
- [2] H. Marne, P. Mukherji, M. Jadhav, S. Paranjape, "Bio-inspired Hybrid Algorithm to Optimize Pilot Tone Positions in Polar-code based OFDM-IDMA System," *International Journal of Communication Systems*, vol. 34, no. 3, pp. 1-15, December 2020. ISSN:1074-5351. (SCIE)
- [3] A. Khade, S. Musale, R. Suryawanshi, V. Vyas, "A DTMOs-based power efficient recycling folded cascode operational transconductance amplifier," *Analog Integrated Circuits and Signal Processing*, vol. 107, pp. 227-238, April 2021. DOI:10.1007/s10470-021- 01809-y. (SCI)
- [4] M. Pote, P. Mukherji, "Design of Microstrip Patch Antenna using Defected Ground Structure for WiMAX Application," *International Journal of Advanced Science and Technology*, vol. 29, no. 8, pp. 5299 - 5311, 2020. ISSN: 2005-4238. (Scopus)
- [5] M. Borse, "Detection based on multi band EEG Transmission network instability, mature & smart sleep apnea," *International Journal of Advanced science & Technology*, vol 29, no.4, pp. 6842-6852, August 2020. ISSN: 2005-4238. (Scopus)

A. Y. 2019-2020

- [1] M. Tasgaonkar, M. Khambete, "Red Profile Moments for Hemorrhage Classification in Diabetic Retinal Fundus Images," *Pattern Recognition and Image Analysis*, vol.29, no.2, pp.224–229, July 2019.DOI:10.1134/S1054661819020093 (ESCI)
- [2] S. Bhagwat, P. Mukherji, "Electromyogram (EMG) based fingers movement recognition using sparse filtering of wavelet packet coefficients," *Sadhana, Indian Academy of Sciences*, vol.45, no.3, pp 775-788, December 2019. DOI:10.1007/s12046-019-1231-9 (SCIE)
- [3] S. Litake, P. Mukherji, "Integration of Fuzzy Logic and ABC Algorithm for Optimized Network Selection in a Heterogeneous Wireless Environment," *International Journal of Sensors, Wireless Communications and Control*, vol. 10, no. 2, pp. 248-261, 2020.DOI: 10.2174/2210327909666190401205928 (SCIE)
- [4] P. Deshpande, P. Mukherji, A. Tavildar, "Accuracy enhancement of biometric recognition using iterative weights optimization algorithm," *EURASIP Journal on Information Security*, vol. 6, no. 1, pp. 1-16, 2019. DOI:10.1186/s13635-019-0089-z (ESCI)
- [5] P. Deshpande, P. Mukherji, A. Tavildar, "An accurate hand-based multimodal biometric recognition system with optimized sum rule for higher security applications," *International Journal of Biometrics*, vol. 11, no. 3, pp. 222-242, 2019. DOI:10.1504/IJBM.2019.100830 (ESCI)
- [6] A. Khade, V. Vyas, M. Sutaone, S. Musale, "Transconductance enhancement of a low voltage low power recycling folded cascode OTA using an asymmetrical current split input stage," *Microelectronics Journal*, vol. 91, pp. 53-60, September 2019. DOI: 10.1016/j.mejo.2019.07.016 (SCIE)
- [7] Khade, V. Vyas, M. Sutaone, "A technique to enhance the transconductance of micro-power improved recycling folded cascode operational transconductance amplifier with reasonable phase margin," *AEU - International Journal of Electronics and Communications*, vol. 108, pp. 148-157, August 2019. DOI: 10.1016/j.aeue.2019.06.026 (SCIE)
- [8] A. Khade, V. Vyas, M. Sutaone, "Performance enhancement of advanced recycling folded cascode operational transconductance amplifier using an unbalanced biased input stage," *Integration*, vol-69, pp.242-250, November 2019. DOI: 10.1016/j.vlsi.2019.04.007 (SCI)
- [9] H. Marne, P. Mukherji, "Performance Enhancement of Bit Error Rate with Increased Capacity using Modified SIC-MUD for Polar Code based OFDM-IDMA System for 5G," *International Journal of Innovative Technology and Exploring Engineering*, vol. 8, no. 9, pp.192-200, July 2019.ISSN: 2278-3075 (Scopus)
- [10] H. Marne, P. Mukherji, "Performance Analysis of Polar-Code based OFDM-IDMA System for M2M Communication using Taguchi Method," *Journal of Advanced Research in Dynamical and Control Systems*, vol. 11, no. 7, pp. 193-204, September 2019. ISSN:1943- 023X (Scopus)
- [11] S. Litake, P. Mukherji, "SFP-based vertical handover with MIH services for integrated Wi- Fi and WIMAX networks," *Int. J. Mobile Network Design and Innovation*, vol. 9, no. 2, pp. 85-95, 2019. DOI: 10.1504/IJMNDI.2019.105304 (Scopus)

A.Y. 2018-19

- [1] K. Gunale, P. Mukherji, "Indoor Human Fall Detection System Based on Automatic Vision Using Computer Vision and Machine Learning Algorithms," *Journal of Engineering Science and Technology*, vol. 13, no. 8, pp. 2587-2605, August 2018. Online ISSN: 1823-4690 (ESCI)
- [2] H. Kondhalkar, P. Mukherji, "A Novel Algorithm for Speech Recognition Using Tonal Frequency Cepstral Coefficients Based on Human Cochlea Frequency Map," *Journal of Engineering Science and Technology*, vol. 14, no. 2, pp. 726 -746, April 2019 Online ISSN:1823-4690 (ESCI)
- [3] A. Khedkar, M. Sumathi, M. Murugan, "ICI Mitigation in OFDM system using Negative Peak Augmented Raised Cosine Power Pulse," *International Journal of Wireless Personal Communications*, vol. 109, pp. 657-673, November 2019. DOI :10.1007/s11277-019-06584-8 (SCIE)
- [4] S. Paranjape, P. Mukherji, S. Barani, M. Sutaone, "Error control technique for loss recovery in cluster based Mobile Wireless Sensor Networks," *Journal of Engineering and Applied Sciences*, vol. 14, no. 3, pp. 935-940, January 2019. DOI :10.3923/jeasci.2019.935.940 (Scopus)

A.Y. 2017-18

- [1] A. B. Lamb, M. B. Khambete, "No-reference perceived image quality measurement for multiple distortions," *Multimedia Tools and Applications*, vol. 77, pp. 8653–8675, April 2018, DOI:10.1007/s11042-017-4761-3 (SCIE)
- [2] S. Mangale, M. B. Khambete, "Approach for moving object detection using visible spectrum and thermal infrared imaging," *Journal of Electronic Imaging*, vol. 27, no. 3, 033004, pp. 1-12, May 2018, DOI: 10.1117/1.JEI.27.3.033004 (SCIE)
- [3] S. Mangale, M. B. Khambete, "Gray level co-occurrence matrix feature based object tracking in thermal infrared imagery," *Journal of Electronic Imaging*, vol. 27, no. 3, 033021, pp.1-9, May 2018, DOI:10.1117/1.JEI.27.3.033021 (SCIE)
- [4] S. Paranjape, S. Barani, M. Sutaone, P. Mukherji, "Stable Cluster Based Data Gathering and Congestion Control Protocol for Mobile Wireless Sensor Networks," *Journal of Computational and Theoretical Nanoscience*, vol. 15, no. 1, pp. 153-160, January 2018. DOI: <https://doi.org/10.1166/jctn.2018.7068> (SCIE)
- [5] K. G. Gunale, P. Mukherji, "Deep Learning with a Spatiotemporal Descriptor of Appearance and Motion Estimation for Video Anomaly Detection," *Journal of Imaging*, vol.4, no. 6, pp:79, June 2018, DOI: <https://doi.org/10.3390/jimaging4060079> (ESCI)
- [6] A. K. Dadoria, K. Khare, U. Panwar, A. Jain, "Performance evaluation of domino logic circuits for wide fan-in gates with FinFET," *Springer Microsystem Technologies*, vol. 24, no. 8, pp. 3341-3348, January 2018, DOI:10.1007/s00542-017-3691-3 (SCIE)
- [7] M. S. Borse, S. Patil, "3-Dimensional Reconstruction of GM," *International Journal of Biomedical Engineering & Technology (IJ BET)*, vol.24, no.3, pp. 264-284, ISSN online: 1752- 6426, July 2017. (ESCI & Scopus)

A.Y. 2015-2016

- [1] A. B. Lamb, M. B. Khambete, "No-Reference Perceived Image Quality algorithm for Demosaiced Images," *International Journal of Advanced Computer Science and Applications (IJACSA)*, vol. 7, no. 1, pp. 285-289, 2016. DOI: 10.14569/IJACSA.2016.07013 (ESCI)
- [2] A. B. Lamb, M. B. Khambete, "Perceived No-Reference Image Quality measurement for chromatic aberration," *Journal of Electronic Imaging*, vol. 25, no. 2, pp. 023004(1-14), March 2016, DOI: 10.1117/1.JEI.25.2.023004 (SCIE & Scopus)
- [3] S. N. Ohatkar, D.S. Bormane, "Hybrid Channel Allocation in Cellular Network Based on GA and PSO Methods," *IET Communications*, vol. 10, no. 13, pp. 1571-1578, May 2016, DOI:10.1049/iet-com.2015.0757 (SCI)
- [4] S. Paranjape, P. Mukherji, "Energy Efficient Scheduling Technique for Cluster Based Data Gathering in MWSN," *International Journal of Applied Engineering Research Publications (IJAER)*, vol. 10, no.13, pp.33480-33485, January 2015. ISSN No. 0973-4562 (Scopus) Y. 2014-2015
- [5] M. Tasgaonkar, M. B. Khambete, "Integrating Fuzzy C-Means and Mahalanobis Metric Classification for Exudate Detection in Color Fundus Imaging," *Journal of Mechanics in Medicine and Biology*, vol. 15, no. 5, pp. 1-13, February 2015. DOI:10.1142/S0219519415500852 (SCIE)
- [6] S. N. Ohatkar, D. S. Bormane, "An Optimization Technique for Efficient Channel Allocation in Cellular Network," *Journal of Communication Technology and Electronics*, Vol. 59, pp. 1225-1233, November 2014. DOI: <https://doi.org/10.1134/S1064226914110175> (SCI)

A.Y. 2013-2014

- [1] M. Khambete, A. Divekar, "DCT based pan sharpening of satellite images using Adaptive linear model," *Journal of the Indian Society of Remote Sensing*, vol. 42, no. 1, pp. 249-255, October 2013, DOI: <https://doi.org/10.1007/s12524-013-0292-1> (SCIE and Scopus)
- [2] P.V.S. Shastry, "Netlist Level Hardware IP Protection by Obfuscation Technique using Key- FSM," *International Journal of Computer Applications in Technology*, vol. 5, no. 5, pp. 1614- 1619, May 2014, Online ISSN: 1741-5047 (Scopus)

National / International Journal Non-Scopus Indexed

A.Y. 2023 - 2024

- [1] Bhausahab Salve, Shriram Kulkarni, Ratnaprabha Borhade Vaishnavi Chavan, Tanvi Chalse Mansi Jadhav, Shweta Shinde, "Knee Osteoarthritis Detection using Neural Networks", *Indian Journal Of Technical Education*, June 2024
- [2] S. Rajput, P. Mukherji, N. Deodhar, A. Chitnis, S. Awachat, P. Godse, "Comparatiive Analysis of Effient Implementation of CNN on CPU and GPU for image Processing and Implementation of Basic CNN Operations in Verilog" *International Journal of Microsystems and IoT* Feb 2024

A.Y. 2022 - 2023

- [1] P. Waghmare, A. Deshpande, "A Case Study on Effective Use of Active Learning Strategies to Increase Learner Engagement in Digital Marketing Course", *Journal of Graduate Research in Engineering and Technology (GRET)*, Vol. 1, Issue 8 Sep. 2022, DOI: 10.47893/GRET.2022.1149
- [2] A. Patil, N. Deshpande, "Selection of Audit Courses in Engineering Curriculum", *Journal of Graduate Research in Engineering and Technology (GRET)*, Vol. 1, Issue 8, Sep. 2022, DOI: 10.47893/GRET.2022.1146
- [3] B. Pathak, S. Potadar, P. Mukherji, "Implementation of Outcome Based Education for the course 'Digital Image Processing'", *Journal of Graduate Research in Engineering and Technology (GRET)*, Sep. 2022, DOI: <http://dx.doi.org/10.47893/GRET.2022.1156>
- [4] V. Sisale, P. Mukherji, "Importance of students feedback for modifying the course syllabus and revising curriculum of Undergraduate Electronics and Telecommunication program", *Journal of Graduate Research in Engineering and Technology (GRET)*, Vol.1, Iss.8, Sep. 2022, DOI: <http://dx.doi.org/10.47893/GRET.2022.1154>
- [5] S. Nichale, A. Gaikwad, S. Shirbahadurkar, "A Review: Analysis of Air Quality Index (AQI)", *International Journal of All Research Education and Scientific Methods (IJARESM)*, Vol. 10, Iss. 7, Jul. 2022, DOI: http://www.ijaresm.com/uploaded_files/document_file/Mrs._Snehal_Ghodake_Ni_chale_ktU6.pdf
- [6] M. Dixit, V. Sisale, "Innovative teaching-learning using crossword puzzles", *Journal of Graduate Research in Engineering and Technology (GRET)*, Vol.1, Iss.8, Sep. 2022, DOI: <http://dx.doi.org/10.47893/GRET.2022.1147>
- [7] V. Dhande, P. Kanale, M. Karlekar, K. Lodha, A. Patil, "Visualizing Socioeconomic Data in India: A Comprehensive Methodology for Choropleth Map Creation", *International Journal of Software & Hardware Research in Engineering (IJSHRE)* ISSN-2347-4890, Vol. 11 Iss. 5, May 2023, DOI: <https://ijournals.in/wp-content/uploads/2023/06/7.IJSHRE-110509-Vibhuti.pdf>
- [8] G. Chaure, A. Dani, V. Hapse, P. Jadhav, S. Ohatkar, "E-commerce recommendation system using reverse image search and questionnaire", *Journal of Emerging technologies and Innovative research (JETIR)*, Vol.10 Iss. 5, May 2023, DOI: <https://www.jetir.org/view?paper=JETIRFX06184> A. Y. 2021-2022

- [9] A. Pomane, S. Sanadi, A. Shinde, M. Borse. "Covid 19 detection using chest X-ray," *International Journal of Advanced Technology in Engineering & Science*, vol. 9, no. 7, pp. 5- 11, July 2021. ISSN: 2348-7550
- [10] S. Potadar, R. Fale, P. Kothawade, A. Padale. "Attendance Management system using Face Recognition," *International Journal of Engineering Research & Technology*, vol. 10, no. 86, pp.1-6, August 2021. ISSN: 2278-0181
- [11] N. Dhande, A. Bharambe, I. Joshi, B. V. Pathak. "Colon Cancer detection from Histopathological Images using InceptionResNetV2 ," *The International journal of analytical and experimental modal analysis*, vol. XIII, no. X, pp. 1141-44, October 2021. ISSN: 0886-9367

A.Y. 2020-2021

- [1] A. Chaudhari, P. Mukherji. "Improved performance of antenna using DGS for 5G applications," *International Research Journal of Engineering and Technology*, vol 7, no. 9, pp. 378-382, Sept. 2020. ISSN: 2395-0056
- [2] R. Kulkarni, A. Kale, S. Ohatkar. "Spatial Modulation for Future Wireless Network," *International Journal of Research and Analytical Reviews*, vol. 8, no. 1, pp 236 - 241, Jan 2021. DOI: 10.6084/m9.doi.one.IJRARJFM1031
- [3] A. Patil, S. Hulwan. "Heart-Rate Variability Estimation Using Photoplethysmography Signal," *International Journal of Advanced Research in Science, Communication and Technology*, vol. 9, no. 2, pp. 67-78, Sept. 2020. ISSN No: 2581-9429
- [4] D. Taley, B. Pathak. "Comprehensive Study of Software Testing Techniques and Strategies: A Review," *International Journal of Engineering Research & Technology*, vol. 9 no. 08, pp. 817-822, August 2020. ISSN: 2278-0181
- [5] B. Pathak, C. Dhole, H. Hajare, M. Zambare. "Stress Detection From Speech Signal Using MFCC, SVM And Machine Learning Techniques," *International Journal of Latest Trends in Engineering and Technology*, vol. 17, no. 3, pp. 041-044, September 2020. e- ISSN:2278-621X DOI: <http://dx.doi.org/10.21172/1.173.06>
- [6] Y. Dharmadhikari, A. Haldule, V. Sisale. "Human detection and rescue system by ROBOT," *International Engineering Research Journal*, vol. 3, no. 4, pp. 6462-6464, Sept 2020. ISSN:2395-1621
- [7] T. Chanda, A. Bapat, A. Amritkar, H. Kabra, G. Ramanrao, V. Saxena, S. Vanarase. "Acoustic Release using Fusible Link," *International Journal of Scientific & Engineering Research*, vol. 11, no. 8, pp. 1768-1776, August 2020. ISSN: 2229-5518
- [8] A. Deshpande, M. Gaikwad, S. Patki, A. Rathi, S. Roy. "Shadow detection from aerial Imagery with morphological preprocessing and pixel clustering methods," *ICTACT Journal on Image and Video Processing*, vol. 11, no. 03, pp. 2385-2390, February 2021. ISSN: 0976-9102
- [9] S. Ohatkar, A. Hadkar, A. Jain, H. Kadus. "Acoustic mobile camera for Sound Localization," *Gradiva Review Journal*, vol. 7, no. 6, pp 194-202, 2021. ISSN: 0363-8057
- [10] S. Gawade, R. Hankare, P. Shinde, P. Ghatkamble. "Virtual Vigilance System," *International Journal of Engineering Research and Technology*, vol. 10, no. 6, pp. 613-

- [11] P. Deshpande, D. Gore, R. Jujare, P. Ghatkamble. “Android Based Patient Health Monitoring System,” *International Journal of Advanced Research in Computer and Communication Engineering*, vol. 10, no. 6, pp. 154-158, June 21. DOI: 10.17148/IJARCCE.2021.10633
- [12] B. Pathak, P. Deshmukh, P. Raut, P. Dhattrak. “Classification of Anxiety Disorder and Depression Disorder from EEG using SVM,” *International Journal Of Creative Research Thoughts*, vol. 9, no. 6, pp. f817-f821, June 2021. ISSN: 2320-2882
- [13] B. Pathak, D. Banerjee, A. Kedari, S. Jagtap. “Seizure Detection from EEG Signals using Wavelets and Three Different Classifiers,” *International Journal Of Analytical And Experimental Modal Analysis*, vol. 13, no. 6, pp. 2507-2514, June 2021. ISSN :0886-9367
- [14] B. Pathak, A. Shitkal, R. Wankhede, V. Shelke. “Design and Implementation of Human Lie Detector using Polygraph for Stressful Situations using four Biomedical Sensors,” *Gradiva Review Journal*, vol. 7, no. 6, pp. 508-516, June 2021. ISSN: 0363-8057
- [15] A. Thakarke, S. Ugale, S. Nale, M. Dixit. “Credit card fraud detection using bagging and boosting algorithms,” *International Journal of Science and Research*, vol.10 no.07, pp. 849- 852, July 2021. ISSN: 2319-7064
- [16] G. Badhe, S. Bahadurkar, A. Mane, S. Chaudhary. “Health Monitoring System,” *International Journal of Advanced Research in Computer and Communication Engineering*, vol. 10, no. 6, pp. 543-545, June 2021. ISSN: 2278-1021. DOI: 10.17148/IJARCCE.2021.106114
- [17] P. Mind, G. Palkar, A. Mahamuni, S. Sahare. “Smart Stick for Visually Impaired,” *International Journal of Engineering Research & Technology*, vol. 10, no. 6, pp. 196-198, June 2021. ISSN:2278-0181
- [18] S. Yamyar, V. Bhandarkar, V. Sisale. “An Intelligent Coin Dispensing Machine with Fake Note Detection,” *International Journal of Engineering Research & Technology*, vol. 10, no. 05, pp. 529-533, May 2021. ISSN: 2278-0181

A.Y. 2018-2019

- [1] H. Marne, P. Mukherji. “Implementation of OFDM-IDMA System Based on Low Complexity Polar Decoder for DVB in 5G,” *International Journal of Research in Electronics and Computer Engineering*, vol. 7, no. 2, pp. 621-628, April 2019. ISSN:2393-9028
- [2] K. Gunale, P. Mukherji. “Threshold Based Approach for Human Fall Detection System,” *Journal of Applied Science and Computations*, vol. 5, no. 7, pp.78-87, July 2018. ISSN: 0076- 5131
- [3] S. Ohatkar, A. Bankar, P. Chikhalikar, A. Gawade. “Analysis of VANET protocols for Urban and Rural area using QualNet Simulator,” *MAT Journals, Journal of Telecommunication Study*, vol. 4 no. 1, pp. 18-26, April 2019. DOI:10.5281/zenodo.2615585
- [4] S. Ohatkar, A. Bankar, P. Chikhalikar, A. Gawade. “Comparative Analysis of Protocols Applied in MANET and VANET Using QualNet Simulator,” *International Journal of*

Current Engineering and Scientific Research, vol.6, no.4, pp 105-112, 2019.ISSN (PRINT): 2393- 8374, (ONLINE): 2394-0697

- [5] R. Edake, A. Patil. "Cardiac Arrhythmia Detection through ECG Signals," *International Journal of Electrical, Electronics and Data Communication*, vol. 6, no.19, pp. 39-42, Oct 2018. eISSN:2320-2084
- [6] A.Patil, N. Palan, M. Namde, M. Narlawar, S. Paygude. "Detection of Edited Videos and the Software and Rendering Options used for Editing," *International Journal of Research and Analytical Reviews*, vol. 6, no. 2, pp. 215-219, Jun 2019. E-ISSN 2348-1269, P- ISSN 2349- 5138
- [7] D. Patil, N. Mhetre, S. More, B.Pathak, N. Palan. "Stress Level Detection from Human Speech Using Machine Learning Techniques," *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 8, no. 3, pp. 2456-2462, March 2019. ISSN(Online):2319-8753
- [8] N. Gaikwad, P. Hirve, B. Pathak. "Two Way Communication Systems Using Speech and Sign Language: Survey," *International Journal of Innovative Research in Computer and Communication Engineering*, vol. 07, no. 02, pp.1-44, Feb 2019.DOI: 10.15680/IJIRCCE.2019. 0702001

A.Y. 2017-18

- [1] S. Mangale, R. Tambe, M. Khambete. "Object detection and tracking in thermal video using directed acyclic graph (DAG)," *ICTACT Journal On Image And Video Processing*, vol.08, no. 01, pp. 1566-1574, Aug 2017.ISSN: 0976-9102
- [2] H. Kondhalkar, P. Mukherji. "A Database of Marathi Numerals for Speech Data Mining," *International Journal of Advance Research in science and Engineering*, Vol. 6, no.10, pp. 395- 399, Oct 2017.ISSN:2319-8346
- [3] S. Ohatkar, S. Thakare, R. Chavan, M. Kulkarni, K. Mehetre. "Real Time Implementation of Data Communication using IPV4 Telecom Network through Sdhstm-4 Digital Transmission WAN," *International Journal of Research in Engineering Technology*, vol. 3, no. 4, pp.16-22, June 2018. ISSN: 2455-1341, DOI: 10.29126/24551341/ENGJ-V3I4P3
- [4] S. Rajput, N. Salve, A. Gupta, A. More. "Maintaining spectrum sharing through software puzzles in WSN," *International Journal of Advance Research and Innovative Idea in Education*, vol. 04, no. 3, pp.1964-1969, May2018.ISSN: 2395-4396
- [5] S. Rajput, M. Ninganur, S. Bagal, P. Kose. "Comparative Analysis of Agricultural Field Monitoring Techniques," *International Journal of Recent Trends in Engineering & Research*, vol. 03, no. 10, pp. 161-168, Oct 2017.ISSN: 2455-1457
- [6] M. Dixit, I. Agarwal, M. Chawandke, R. Kulkarni. "Android Based Digital Storage Oscilloscope," *International Journal of Innovative Research in Technology*, vol. 4 no. 6, pp. 100-104, November 2017. ISSN: 2349-6002
- [7] S. Paranjape, S. Barani, M. Sutaone, P. Mukherji. "Stable Cluster Based Data Gathering and Congestion Control Protocol for Mobile Wireless Sensor Networks," *Journal of Computational and Theoretical Nanoscience*, vol. 15, no.1, pp.153-160, Jan 2018.ISSN: 1546- 1963

- [8] S. Litake, P. Mukherji. "Modeling Seamless Vertical Handovers in Heterogeneous Wireless Networks," *International Journal on Future Revolution in Computer Science and Communication Engineering*, Vol. 3, no. 11, pp. 524-531, 2017. ISSN: 2454-4248
- [9] S. Kalbhor, A. Deshpande. "Real-time implementation for digit recognition using Raspberry Pi," *International Journal of Latest Trends in Engineering and Technology*, vol. 10, no. 3, pp. 50-56, 2018.e-ISSN:2278-621X
- [10] S. Patale, R. Borhade. "Classification and Detection of Lung Cancer using Machine Learning Approach," *International Journal of Pure and Applied Mathematics*, vol. 118, no. 24, pp. 1-9, May 2018.ISSN 1311-8080

A.Y. 2015-2016

- [1] S. N. Ohatkar, U. S. Banarase, A. V. Borkar, S. H. Gund, "Bandwidth Enhancement of Microstrip Slot Antenna," *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, vol. 5, no. 6, pp.98-102, Jun 2016. ISSN 2278 – 2540.
- [2] S. N. Ohatkar, S. B. Rane, A. A. Ambesange, A. More,S.Rane, "Nanostructured Metal Oxide Based Thick Film Sensors," *International Journal of Latest Technology in Engineering, Management & Applied Science* , vol.5, no.5, pp. 93-97,May 2016,ISSN 2278 – 2540.
- [3] S. N. Ohatkar, N. G. Amlani, A. P. Dange, D.Kadam, "Probe and Edge Fed Miniaturized Meander Slot Antenna Using IE3D," *International Journal of Latest Technology in Engineering, Management & Applied Science* , Vol.5, no.4, pp 27-32,April 2016,ISSN 2278 – 2540.
- [4] S. Mohane, M. S. Borse, "Comparative study of brain tumor detection using morphological operators," *International Journal of Research in Engg. & Technology*, vol.4, no.3, pp.422-428, Jan.2015. ISSN: 2321-7308.
- [5] S. Matkar, M. S. Borse, "Image Segmentation methods for brain MRI Images," *International Journal of Research in Engineering and Technology*, vol.04, no.03, pp. 263-266, Jan.2015. eISSN: 2319-1163 | pISSN: 2321-7308.
- [6] M. S. Borse, S. Patil, "Comparison of Different Fusion Techniques for 2D MRI Images," *International Journal on Recent Trends in Computing and Communication*, vol. 3, no.2, pp.500 – 503, Jan.2015. ISSN: 2321-8169 .
- [7] S. R. Chaudhary, K. R. Jadhav, " Performance Analysis of STBC-MIMO OFDM System with DWT & FFT," *International Journal of Technical Research and Applications*, vol.3, no.5, pp:227-232, Sep-Oct.2015. ISSN:2320-8163.
- [8] S. R. Chaudhary, A.V. Yadao, "Capacity and Performance Analysis of MIMO-Space Time Block Code System," *International Journal Of Electronics And Communication*, vol.6, no. 4, pp. 138-140, Oct - Dec 2015. ISSN:2230-7109.
- [9] S. Jog, M. A. Dixit, A. Rajgopalan, S. D. Ranade, "KNN and SVM based Satellite Image Classification," *International Journal Of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering*, vol. 4, no. 6, pp.158-162, June 2016. ISSN (Online): 2321-2004 ISSN(Print): 2321-5526.

A.Y. 2014-2015

- [1] V. L. Kaundanya, A. S. Patil, A. Panat, "Classification of Emotion from EEG using KNN classifier," *International Journal of Advance Science Engineering and Technology*, vol. 3, no.2, pp. 42-45, Apr. 2015. ISSN:2321-9009IJASEAT-IRAJ-DOI-2013.
- [2] P. V. S. Shastry, "Algorithm For Determining Most Qualified Nodes for Improvement In Testability," *International Journal on computer Technology and application 2014*, vol. 5, no.1, pp.1641-1645, Sep. 2014. ISSN:2229-6093. (Full paper not available)
- [3] H. N. Patil, S. N. Ohatkar, "Modulation Techniques for Software Defined Radio," *International Journal for Scientific Journal and Education*, vol. 2, no. 9, pp. 1948-1957, Sep. 2014. ISSN: 2321-7545.
- [4] R. K. Nyayadhis, S. N. Ohatkar, "Hybrid Channel Assignment Technique using PSO for Cellular Network," *International Journal of Electrical, Electronics and Data Communication*, vol. 3, no. 3, pp. 61-64, Mar. 2015. ISSN:2320-2084.
- [5] S. R. Chaudhary, A.J. Patil, "Performance of spatial multiplexing Diversity and Combined Technique for MIMO-OFDM System," *International Journal of Mobile Network Communications & Telecommunication & Telematics*, vol. 4, no. 5, pp. 55-62, Oct.2014. DOI:10.5121/IJMNCT.2014.4505.
- [6] A. R. Khedkar, Dr. M. Murugan, "Behavioral Analysis of OFDM Transmission to the Variations in Doppler Shift for Flat Frequency Faded Multipath Channel," *IETE National Journal of Innovation & Research*, vol.2, no.1, pp. 30-34, Jun 2014. ISSN: 2302-8961.

A.Y. 2013-2014

- [1] A. Panat, A. Patil, G. Galgatte, "Comparison of Statistical parameters of FMRI images of Brain for the purpose of analysis of emotions," *IET ONLINE*, pp. 189 -194, ISBN: 978-1-84919-842-4
- [2] W. Paliwal, P.V.S. Shastry, "Performance Enhancement Using Synchronous Elastic Circuits," *International Journal of Computer Technology And Electronics Engineering*, Vol.4, no. 3, pp.1-6, June 2014. ISSN: 2249-6343
- [3] H.Auti, P.V.S. Shastry, M. Sutaone, "Implementation of AES encryption and decryption using T boxes on FPGA", *International Journal of Computer Technology And Electronics Engineering*, Vol.4, no.3, pp.17-20, June 2014. ISSN: 2249-6343
- [4] A.Page, P.V.S. Shastry, "AES -128 Key Expansion with LUT and OTF S-BOX", *International Journal of Computer Technology And Electronics Engineering*, Vol.4, no.3, pp. 21- 24, June 2014. ISSN:2249-6343
- [5] P.V.S. Shastry, M. Sutaone, "On the Fly AES Key Expansion For All key Sizes on ASIC", *International Journal of Computer Technology And Electronics Engineering*, Vol.12, no.6, pp. 217-221, January 2014. ISSN: 2229-6093
- [6] V. Waghmare-Ujgare, S. N. Ohatkar, "Analysing Channel Allocation Techniques for Minimizing Interference in Cellular Network", *International Journal of Advanced*

Research in Computer Science and Software Engineering, Vol.3, no.12, pp. 1161-1166, December 2013. ISSN: 2277 128X

- [7] A. Panat, B.V. Sathe-Pathak, “A Speech transformation system for emotion conversion using MFCC & Modeling using GMM”, *International Journal (IJECCCE)*, Vol. 4, no. 4, pp. 321-325, December 2012. ISSN-2249-071X
- [8] R. Sahasrabudhe, M. S. Borse, “Classification of brain Encephalic tissues from MRI images using Sphere Shaped Support Vector Machine (SSSVM)”, *International Journal of Scientific & Engineering Research*, Vol. 4, no. 7, pp. 2343-2349, July 2013. ISSN 2229-5518
- [9] M. S. Borse, S. Patil. “Literature survey for 3D reconstruction of Brain MRI images”, *International Journal of Research in Engineering & Technology*, vol. 2, no. 11, pp.743-748, Nov. 2013. ISSN: 2319-1163.

National/ International Scopus Indexed Conferences

AY. 2024 - 2025

- [1] Bageshree Pathak, Tejal Bidada, Rutuja Manakapure, Harsha Pawar, Tanvi Jakhalekar, “A Comprehensive Framework for Video Resolution Enhancement: Using Computer Vision and Deep Learning Techniques”, *8th International Conference on Computing, Communication, Control and Automation 2024*, (SCOPUS)
- [2] Vaishnavi Mudliyar, Bageshree Pathak, Anita Patil, “Improved ECG Lead Detection and Classification using YOLOv8”, *8th International Conference on Computing, Communication, Control and Automation 2024* (SCOPUS)
- [3] Manisha Ahirrao, Bageshree Pathak, “Advanced Encryption: Harnessing Hybrid Model”, *ASIANCON 2024 IEEE conference PCCOE* , Pune 2024 (SCOPUS)
- [4] Sandhya Chitnis, Prachi Mukherji, “Denoising of Multiview Images to 3D Point Cloud Visualization using Visual SfM”, *8th International Conference on Computing, Communication, Control and Automation-2024*
<https://ieeexplore.ieee.org/document/10774767> (SCOPUS)
- [5] Varsha Patil, Sharada Ohatkar, “Blockchain for IoT/Industrial IoT applications”, *2024 IEEE International Conference on Blockchain and Distributed Systems Security (ICBDS) 2025*
doi: 10.1109/ICBDS61829.2024.10837075 (SCOPUS)
- [6] Aakanksha Dorage, Aarushi Chopkar; Tanmayee Kulkarni, Ashwini Deshpande, “Predictive Analysis of Pune City’s Air Quality Index: A Machine Learning and Time Series Approach”, *15th International Conference on Computing Communication and Networking Technologies* Kamand, India
<https://doi.org/10.1109/ICCCNT61001.2024.10725381> (SCOPUS)
- [7] Aarya Khodke, Gauri Kulkarni, Shravani Junghare, Ashwini Deshpande, “A Transfer Learning Framework for Elderly Action Monitoring and Stillness Detection”, *4th International Conference on Computer, Communication, Control & Information Technology Hooghly*, India 2025 (SCOPUS)
<https://doi.org/10.1109/C3IT60531.2024.10829437> (SCOPUS)
- [8] Shreeya Desai, Mansha Mattoo, Ashwini Deshpande, Ananya Dey, Siddhi Akiwate, “Vegetation Change Detection Through NDVI Analysis Using Landsat-8 Data”, *4th International Conference on Computer, Communication, Control & Information Technology (C3IT), Hooghly, India 2025*
<http://dx.doi.org/10.1109/C3IT60531.2024.10829460> (SCOPUS)
- [9] Mrs. Prachi Waghmare, Dr Ashwini M. Deshpande, “Marathi Text to ISL Gloss Translation Using LSTM, GRU and Transformer Neural Models”, *International Conference on Intelligent Computing and Sustainable Innovations in Technology (IC-SIT)*, (SCOPUS)
- [10] Tejashree Pawar, Ashwini Deshpande, “Machine Vision-based Real-Time Onion Classification and Sorting Using YOLOv8 Model”, *IEEE 3rd World Conference on Applied Intelligence and Computing 2024*(SCOPUS)
<https://doi.org/10.1109/AIC61668.2024.10731009> (SCOPUS)

- [11] Prachi Mukherji, Seema Rajput, Shreeni Kalyanshetty, Vedika Kamane,” Comparative Analysis of Common Source CMOS Amplifier & Two Stage CMOS Common Source Amplifier using 45nm technology”, *ICITCEE 2025* https://drive.google.com/file/d/1aNRYEjxekW_njh54x1AfvL3YjA9DDIW8/view?usp=s_haring (SCOPUS)
- [12] Bhakti Kadam, Ashwini M. Deshpande; Ishita Rathod; Riddhi Zanwar; Gaurangi Rathi,”Summarizing Surveillance Videos through Automatic Human Activity Detection”, *International Conference on Computing, Communication, Control and Automation (ICCUBEA)*, Pune, India 2024 <https://doi.org/10.1109/ICCUBEA61740.2024.10775176> (SCOPUS)
- [13] Ganesh Ravindra Padalkar, Madhuri B. Khambete, “Enhancing Semantic Segmentation through a Targeted Approach to Hard-to-Classify Examples ”, *2024 IEEE International Conference on Progress in Informatics and Computing (PIC-2024)*, <https://ieeexplore.ieee.org/document/10892673> (SCOPUS)
- [14] Prachi Mukherji, Kalpana Kumbhar, Sachin Paranjape, “Enhancing Network Security: A Strategic SDN and Genetic Algorithm Approach for Countering DDoS Attacks”, *International Conference on Information and Communication Technology for Intelligent Systems* https://drive.google.com/file/d/1ce6g1DYgjBSNGJzNMHhld8i6NnfS2VYc/view?usp=s_haring (SCOPUS)

A.Y. 2023 - 2024

- [1] A. Deshpande, B. Kadam, “A Comparative Investigation of Deep Feature Extraction Techniques for Video Summarization”, *International Conference on Next Generation Systems and Networks (ICCIS 2022)*, Jul. 2023, DOI: http://dx.doi.org/10.1007/978-981-99-0483-9_37 (Scopus)
- [2] A. Deshpande, P. Waghmare, “Performance Analysis of Neural Machine Translation Models for ASL to ASL Gloss Conversion”, *International Conference on Communication and Intelligent Systems (BITS-EEE-CON 2022)*, Jul. 2023, DOI: http://dx.doi.org/10.1007/978-981-99-2322-9_38 (Scopus)
- [3] V. Kharat, S. Khatdeo, H. Kothe, R. Kshirsagar, M. Dixit, M.S. Balan, “Atmospheric Image Correction and Removal of Cloud Cover for Satellite Images”, *First International Conference on Data Science and Advanced Computing (ICDSAC 2023)*, Vol. 56, Aug.2023, DOI: <http://dx.doi.org/10.1109/ICSCSS57650.2023.10169542> (Scopus)
- [4] T. Choudhary, P. Patil, P. Mane, N. Shinde, B. Pathak, M. S. Balan, “Water Speed Measurement Using Particle Tracking And OpenCV”, *IEEE 5th ICAECC conference, 2023 Fifth International Conference on Advances in Electronics, Computers and Communications (ICAEC)* (Scopus)
- [5] A. Gade, I. Agarwal, K. Agrawal, T. Bidada, A. Deshpande, “Design and Implementation of a Digital Hearing Aid System with an Improved Speech Intelligibility”, *3rd Asian Conference on Innovation in Technology (ASIANCON)* DOI:

[10.1109/ASIANCON58793.2023.10269849](https://doi.org/10.1109/ASIANCON58793.2023.10269849) (Scopus)

- [6] M. Aahirao, B. Pathak, M. Dixit, “AES and its multiple modifications for various applications”, *IEEE-ICAST-2023* (Scopus)
- [7] M. Patil, P. Mukherji, V. Wadhai, “Enhancing Depression Diagnosis through Advanced MRI Image Analysis and Machine Learning Techniques”, *IEEE GCAT*, 19th DEC. 2023, DOI: <http://dx.doi.org/10.1109/GCAT59970.2023.10353316> (Scopus)
- [8] M. Borse, L. Mehta, “Non Invasive Approach for Dental Caries Detection”, *IEEE-PuneCon2023, 6th International Conference on Emerging Technologies in Digital Transformation and Aligned Education*, Dec. 2023 DOI: <https://doi.org/10.1109/PuneCon58714.2023.10450116> (Scopus)
- [9] R. Pawar, P. Mukherji, “Comparative Analysis of Feature Selection Methods for ERP based Depression Detection”, *IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024)*, Apr. 2024 DOI: <http://dx.doi.org/10.1109/IATMSI60426.2024.10502902> (Scopus)
- [10] B. Pathak, I. Agarwal, K. Agrawal, M. Mattoo, S. Ghumtane, “Implementation of website for identification of missing and unrecognized people using an optimized face recognition algorithm”, *IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2024)*, Apr. 2024 DOI: <http://dx.doi.org/10.1109/IATMSI60426.2024.10503131> (Scopus)
- [11] S. Patil, A. Pimparkhedkar, S. Kumari, R. Pawar, “Mobile Augmented Reality for Industrial Training”, *2023 IEEE Engineering Informatics* May 2024 <http://dx.doi.org/10.1109/IEEECONF58110.2023.10520406> (SCOPUS)

A. Y. 2022 - 2023

- [1] R. Pawar, P. Mukherji, “Deep Learning Based BCI For Enhancing Quality of Life of Senior Citizens”, *International Conference on Signal and Information Processing (IConSIP 2022)*, Aug. 2022, DOI: <https://ieeexplore.ieee.org/document/10007439> (Scopus)
- [2] A. Deshpande, G. Inamdar, R. Kankaria, S. Katage, “A Deep Learning Framework for Real-Time Indian Sign Language Gesture Recognition and Translation to Text and Audio”, *6th International Conference on Advance Computing and Intelligent Engineering*, Sep. 2022, DOI: https://doi.org/10.1007/978-981-19-2225-1_26 (Scopus)
- [3] M. Dixit, B. Kelkar, M. Kelkar, L. Chandrasekharan, “Enhanced Color Based Marketing with Psychometric and Demographic Data Analysis Using Machine Learning”, *International Conference on Advanced Communications and Machine Intelligence*, 09-11 Dec. 2022, DOI: https://link.springer.com/chapter/10.1007/978-981-99-2768-5_38 (Scopus)
- [4] K. Deogade, D. Thorat, S. Kale, S. Rajput, H. Kaur, “Credit Card Fraud Detection using Bagging and Boosting Algorithm”, *International Conference on Signal and Information processing*, 26th and 27th Aug. 2022, DOI: 10.1109/ICoNSIP49665.2022.10007446 <https://www.ijsr.net/archive/v10i7/SR21712231418.pdf> (Scopus)

- [5] S. Shetty, A. Kale, M. Jagtap, P. Waghmare, “Comparative Study of Different Models for Language Translation”, *6th International Conference On Computing, Communication, Control And Automation*, 26-27 Aug. 2022 16 Jan. 2023, DOI: <https://ieeexplore.ieee.org/document/10011127> (**Scopus**)
- [6] P. Mukherji, H. khedlekar, “Model of blended learning in alignment with goals of National Education Policy (NEP) 2020 for Engineering education”, *ICCCEE*, 27-29 Apr. 2023, DOI: <https://doi.org/10.1109/ICCCEE55951.2023.10424546> (**Scopus**)
- [7] R. Borhade, S. Barekar, T. Londhe, R. Borhade, S. Kulkarni, “Adaptive hybrid optimization based Deep learning for Epileptic seizure prediction”, *International Conference on IoT based Control Networks and Intelligent Systems(ICICNIS 2023)*, Jun. 2023, DOI: http://dx.doi.org/10.1007/978-981-99-6586-1_38 (**Scopus**)
- [8] J. Karbhari, P. Mukherji, “Alphabet Recognition using Air written Trajectories”, *International Conference on Emerging Smart Computing and Informatics (ESCI 2023)*, 2023, DOI: <https://ieeexplore.ieee.org/document/10099805> (**Scopus**)
- [9] S. Lad, G. Mane, A. Padwal, M. Dixit, “Machine learning based sentiment analysis of Twitter data”, *AIP Conference Proceedings 2494*, 31 Oct. 2022, DOI: <https://doi.org/10.1063/5.0111007> (**Scopus**)
- [10] G. Amrutkar, M. Shinde, K. Thattekar, M. Dixit, “Hand gesture recognition using deep learning”, *AIP Conference Proceedings 2494*, 31 Oct. 2022, DOI: <https://doi.org/10.1063/5.0110700> (**Scopus**)

A. Y. 2021-2022

- [1] K. Joshi, A. Khaparde. “Single channel speech enhancement in modulation domain using particle swarm optimization,” in *International Conference on Sentimental Analysis and Deep Learning (ICSADL)*, Thailand, Nepal, 2021, pp. 141-153.
- [2] S. H. Bhagwat, P. Mukherji, S. Paranjape. “Denoising of Surface Electromyography Signal Using Parametric Wavelet Shrinkage Method for Hand Prosthesis,” in *Innovative Data Communication Technologies and Application*, 2022, pp. 899-913.
- [3] T. Oka, P. Patankar, S. Rege, M. Dixit. “Text Summarization of News articles,” in *Sixth International Conference on ICT for Sustainable Development, Goa, India, 2021*, pp. 441-450.
- [4] S. Shinde, J. Oak, K. Shrawagi, P. Mukherji, “Analysis of WBC, RBC, Platelets Using Deep Learning,” in *IEEE Pune Section International Conference (PuneCon), 2021*, pp. 1-6. DOI: 10.1109/PuneCon52575.2021.9686524.
- [5] T. Kelhe, D. Nair, G. Kulkarni, A. M. Deshpande, “Longitudinal Collision Avoidance In Self-Driving Vehicles Using Deep Learning And Particle Swarm Optimization,” in *IEEE Pune Section International Conference (PuneCon), 2021*, pp. 1-5. DOI: 10.1109/PuneCon52575.2021.9686482.

A.Y. 2020-2021

- [1] S. Bhagwat, P. Mukherji. "Temporal Feature Extraction for Improving Myoelectric based Recognition of Prosthetic Hand," in *International Conference on Wireless Communications Signal Processing and Networking (WiSPNET)*, 2020, pp. 67-71. DOI: 10.1109/WiSPNET48689.2020.9198476
- [2] J. Kavthekar, A. M. Deshpande. "Comparative Analysis of Least Squares method and Extended Kalman filter for Position Estimation in GPS Receiver," in *International Conference on Signal and Data Processing ICSDP-2019*, MITAOE, Alandi, 2021, pp. 389-403. DOI: 10.1007/978-981-15-8391-9_29.
- [3] S. Gajbhiye, A. Karjole, S. Pawar, B. V. Pathak. "Comparison between CNN and RNN techniques for Stress Detection using Speech," in *8th International Conference on Innovations in Computer Science & Engineering (Virtual Conference)*, 2020, pp. 333-340, DOI:10.1007/978-981-33-4543-0.
- [4] B. V. Pathak, S. Mittal, K. Shinde, P. Pawar. "Comparison between LSTM and RNN Algorithm for Speech-to-Speech Translator," in *3rd International Conference on Communication, Circuits, and Systems (iC3S 2020)*, Kalinga Institute of Industrial Technology (KIIT), Bhubaneshwar, India, 2021, pp. 15-23.
- [5] M. Dixit, S. Deshmukh, M. Dongaonkar, S. Jadhav. "Road accident analysis using Random forest algorithm," in *4th International Conference on Recent Trends in Communication & Electronics (ICCE-20)*, 2020, pp. 1-5.
- [6] R. Pawar. "LSB and RLE based approach for increasing payload and security of stego images," in *International Conference on Advances in Artificial Intelligence and Data Engineering, Karkala, India, 2020*, pp. 647-658.
- [7] G. Padalkar, S. D. Patil, M. M. Hegadi, N. K. Jaybhaye. "Drug Discovery using Generative Adversarial Network with Reinforcement Learning," in *International Conference on Computer Communication and Informatics*, 2021, pp. 1-3. DOI: 10.1109/ICCCI50826.2021.9402449.
- [8] T. Kelhe, C. Jain, M. Bhandarkar, A. M. Deshpande. "A Smart Early Warning System for Disease Outbreak with a Case Study of COVID-19 in India," in *IEEE Pune Section International Conference (PuneCon)*, 2020, pp. 113-118.
- [9] G. Amrutkar, M. Shinde, K. Thattekar, M. Dixit. "Hand Gesture Recognition using Deep Learning," in *International Conference on Computational Intelligence in Engineering Systems*, 2020, pp.1-4.
- [10] M. Dixit, S. Lad, G. Mane, A. Padwal. "Machine Learning based Sentiment Analysis of Twitter Data," in *International Conference on Computational Intelligence in Engineering Systems*, 2021, pp.1-4.

A.Y. 2019-2020

- [1] M. Pathade, M. Khambete. "Unsupervised Detection of Dispersion and Merging Activities for Crowded Scenes," in 3rd *International Conference on Advanced Computing and Intelligent Engineering, 2019*, pp. 595-604. DOI: 10.1109/ICOEI.2018.8553923
- [2] M. Vedpathak, P. Mukherji, B. Prasad, "Modeling and Simulation of Inertial Navigation System," in *International Conference on Management, Education Technology and Economics, Fuzhou, China, 2019*, pp. 471-481. DOI:10.1007/978-981-15-2329-8_48
- [3] G. R. More, S. N. Ohatkar. "Effective Vibration Damping using Self Tuning Smart Material," in 3rd *International Conference on Micro-Electronics and Telecommunication Engineering, Ghaziabad, Delhi, 2019*, pp. 65-74. DOI:10.1007/978-981-15-2329-8_7
- [4] S. N. Ohatkar, D. S. Bormane, "Bio-Inspired AI optimization techniques to evaluate data rate and minimize interference in Cognitive Cellular Network," in 1st *International Conference on Data Science, Machine Learning and Applications, 2019*, pp. 82-89. DOI:10.1007/978-981-15-1420-3_9
- [5] A. M. Deshpande, S. Kalbhor, "Video-Based Marathi Sign Language Recognition and Text Conversion Using Convolutional Neural Network," in *Third International Conference on Emerging Trends in Electrical, Communication and Information Technologies, 2018*, pp. 761-773.
- [6] M. Dixit, S. Shaikh, R. Sharma, K. Muley, "Internet Traffic Detection and Classification using Machine Learning," in *International Conference on Micro-Electronics and Telecommunication Engineering, Ghaziabad, 2019*, pp. 19-29.
- [7] A. Khade, V. Vyas, "Operational Transconductance Amplifier Structured Highly Linear Analog Multiplier," in 3rd *International Conference on Microelectronics, Computing and Communication Systems, 2019*, pp. 245-260.
- [8] P. Ghaywate, F. Vyas, S. Telang, S. Mangale. "A Deep Learning Approach for Motion Segmentation Using an Optical Flow Technique," in 10th *International Conference on Computing, Communication and Networking Technologies, Kanpur, India, 2019*, pp. 1-6. DOI: 10.1109/ICCCNT45670.2019.8944422.

A.Y. 2018-2019

- [1] G. R. Padalkar, M. B. Khambete. "Analysis of Basic-SegNet Architecture with variations in training options," in 18th *International Conference on Intelligent Systems Design and Applications (ISDA), Vellore, India, 2018*, pp. 727-735. DOI: 10.1109/ICCSP.2018.8524359
- [2] S. Litake, P. Mukherji. "Fuzzification of Context Parameters for Network Selection in Heterogeneous Wireless Environment," in *Springer International conference on Computer Networks and Inventive Communication Technologies, 2018*, pp. 907-921.
- [3] K. Gunale, P. Mukherji. "An Intelligent Video Surveillance System for Anomaly Detection in Home Environment Using a Depth Camera," in *Springer conference published in Scopus indexed Journal, 2018*, pp. 473-481. DOI:10.1007/978-981-10-8681-6_84 ISNS:978-981-13-0589-4.
- [4] H. Kondhalkar, P. Mukherji. "Speech Recognition using Novel Diatonic Frequency Cepstral Coefficients and Hybrid Neuro fuzzy Classifier," in *International Conference on ISMAC in Computational Vision and Bio-Engineering, 2018*, pp.775-788.
- [5] S. N. Ohatkar, D. S. Bormane, "GA with SVM to Optimize the Dynamic Channel Assignment for Enhancing SIR in Cellular Networks," in *Advances in Signal Processing and Communication,*

Singapore, 2018, pp. 73-83. DOI 10.1007/978-981-13-2553-3_8

- [6] A. Modak, S. Paradkar, S. Manawatkar, A. R. Madane, A. M. Deshpande. "Human Head Pose and Eye State Detection Based Driver Distraction Monitoring System," in 3rd International Conference on Computer Vision and Image Processing (CVIP), Jabalpur, India, 2018, pp. 403-421.
- [7] M. Dixit, A. Moholkar, S. Limaye, D. Limaye, "Naive Bayes and SVM based NIDS," in International Conference on Inventive Computation Technologies, Coimbatore, Tamil Nādu, India ,2018, pp. 527-532.
- [8] M. Dixit, R. Sharma, S. Shaikh, K. Muley, "Internet Traffic Detection using Naïve Bayes and K-Nearest Neighbors (KNN) Algorithm," in International Conference on Intelligent Computing and Control Systems, Madurai, 2019, pp. 1153-1157.
- [9] S. S. Musale, L. Dhende, S. D. Shirbahadurkar, A. N. Najan. "Grey hole and Cooperative attack prevention protocol for MANET's," in International Conference on Emerging Technologies in Data Mining and Information Security, 2018, pp. 559-566.
- [10] B. V. Pathak, D. Patil, S. More, N. Mehetre. "Comparison between five classification techniques for classifying emotions in human speech," in International Conference on Intelligent Computing and Control Systems, Madurai, India, 2018, pp. 1454-1459.
- [11] B. V. Pathak, D. Pondkule, R. Shaha, A. Surve. "Visual Cryptography and Image Processing based approach for bank security applications," in Second International Conference on Computer Networks and Innovative Communication technologies, 2019.

A.Y. 2017-2018

- [1] G. Deshmukh, M. Pathade, M. Khambete. "Supervised Classification of Type of Crowd Motion in Video Surveillance System," in IEEE International Conference on Signal Processing and Communication, Coimbatore, 2017, pp. 99-101.
- [2] A. B. Lamb, M. Khambete. "Image Quality Assessment Database for Demosaicing Artifacts," in International Conference on Communications and Signal Processing, 2018, pp. 1100-1105. DOI: 10.1109/ICCSP.2018.8524359
- [3] S. N. Ohatkar, K. Tupe. "Applying Bacterial colony optimization to cognitive cellular network for evaluating SINR," in International Conference on Recent Advancements in Computer, Communication and Computational Sciences, Ajmer, India, 2017, pp. 173-181.
- [4] S. N. Ohatkar, K. Tupe. "Bacterial colony optimization for data rate evaluation in cognitive cellular network," in Second International conference on Smart Trends for Information Technology and Computer Communications, Pune, 2017, pp. 292-299.
- [5] M. A. Dixit, R. Ukarande, "Internet Traffic Intrusion Detection System Using Adaptive Neuro-Fuzzy Inference System," in Second International Conference on Smart Trends for Information Technology and Computer Communications, 2017, pp. 21-28.
- [6] M. V. Pathade, S. Mardhani, H. Kadiyala, K. Shukla, "Detection of Dispersion in Crowded Scenes for Surveillance Applications," in IEEE International Conference on Trend in Electronics and Informatics, Tamilnadu, 2018, pp. 880-883.
- [7] H. Kawade, A. M. Deshpande. "Implementation of Video Stabilization Algorithm for Surveillance System," in *3rd International Conference on Computing Communication Control and automation (ICCUBEA)*, 2017, pp. 1-4.

- [8] S. Kalbhor, A. M. Deshpande. "Digit Recognition Using Machine Learning and Convolutional Neural Network," in *International Conference on Trends in Electronics and Informatics*, 2018, pp. 604-609.
- [9] R. Damle, B. V. Pathak. "Face recognition-based attendance system using machine learning algorithms," in *International Conference on Intelligent Computing and Control Systems*, Madurai, 2018, pp. 414-419.
- [10] A. Kamble, S. A. Potadar, "Lane departure warning system for advanced driver's assistance," in *International Conference on Intelligent Computing and Control Systems*, 2018, pp. 1775-1778.
- [11] M. K. Pote, P. Mukherji, "Enhancement of Microstrip Patch Antenna Parameters Using Defective Ground Structure," in *International Conference*, Singapore, 2018, pp. 69-80. DOI:10.1007/978-981-10-7386-1_6
- [12] S. Mane, S. Mangale, "Moving object detection and tracking using convolutional neural networks," in *2nd International Conference on Intelligent Computing and Control Systems*, 2018, pp. 1809-1813.
- [13] S. S. Musale, V. Ghiye, "Smart Reader for Visually Impaired," in *IEEE International Conference for Inventive Systems and Control*, 2018, pp. 339-342.
- [14] A. Patil, K. Behele, "Classification of Human Emotions using Multiclass Support Vector Machine," in *Third International Conference on Computing, Communication, Control And Automation (ICCUBEA)*, 2017, pp. 1-4.

A.Y. 2016-2017

- [1] V. M. Belekar, P. Mukherji, M. Pote. "Improved microstrip patch antenna with enhanced Bandwidth, efficiency and reduced return loss using DGS," in *IEEE International Conference (WISPNET)*, 2017, pp. 2509-2512.
- [2] S. Mangale, M. B. Khambete. "Camouflaged Target Detection and tracking using thermal infrared and visible spectrum imaging," in *International Symposium on Intelligent Systems Technologies and Applications*, 2016, pp. 193-207. DOI:10.1007/978-3-319-47952-1_15
- [3] S. N. Ohatkar, Y. Gunjkar. "ABC and TLBO Technique for Evaluating Data rate in Wireless Network," in *International Conference on Smart Trends for Information Technology and Computer Communications, Communications in Conference Computer and Information Science*, 2016, pp. 390-399. DOI: 10.1007/978-981-10-3433-6_47
- [4] S. N. Ohatkar, D.S. Bormane, "Interference Minimization for Hybrid Channel Allocation in Cellular Network with Swarm Intelligence," in *2nd International Conference on Information and Communication Technology for Intelligent Systems (ICTIS)*, Ahmedabad, India, 2017, pp. 298-306
- [5] and Communication Technology for Intelligent Systems (ICTIS), Ahmedabad, India, 2017, pp. 298-306
- [6] A. Gathekar, A. M. Deshpande. "Implementation of melody extraction algorithms from polyphonic audio for music information retrieval," in *IEEE International Conference on Advances in Electronics, Communication and Computer Technology*, 2016, pp. 6-11. DOI: 10.1109/ICAECCT.2016.7942546
- [7] S. R. Garipalli, B. V. Sathe-Pathak, A. R. Panat. "Analysis of speech signals using excitation source information," in *International Conference on Micro-electronics and Telecommunication*

Engineering, Calcutta, 2016, pp. 1-6. DOI:10.1109/ICMETE 2016.12

- [8] S. Joshi, M. S. Borse. "Detection and prediction of diabetes mellitus using back propagation neural network," in International Conference Micro Electronics & Telecommunication Engineering, 2016, pp. 110-113. DOI: 10.1109/ICMETE.2016.11
- [9] S. N. Gadakh, A. S. Khade. "Design and optimization of (16*16) bit multiplier using vedic mathematics," in International Conference on Automatic Control and Dynamic Optimization Techniques (ICACDOT), 2016, pp. 460-464. DOI: 10.1109/ICACDOT.2016.7877628
- [10] J. Jadhav, S. A. Potadar, "Human Detection using Deep Learning Technique," in Proceedings of the 2nd International Conference on Inventive Computation Technologies, 2017, pp. 1062-1067

A.Y. 2015-2016

- [1] S. Mangale, M. B. Khambete. "Moving Object detection using Visible Spectrum," in International Conference on Industrial Instrumentation and Control (ICIC), 2015, pp. 590-593. DOI:10.1109/IIC.2015.7150810.
- [2] M. Tasgaonkar, M. B. Khambete. "Using Differential Morphological Profile for Microaneurysm Detection In diabetic Retinal Fundus images," in International Conference on Signal and Information Processing (IConSIP), 2016, pp. 1-5, DOI: 10.1109/ICONSIP.2016.7857496.
- [3] M. Sutaone, P. Mukherji, S. Paranjape. "Trust-based Cluster head Validation and Outlier Detection Technique for Mobile Wireless Sensor Networks," in IEEE WiSPNET, 2016, pp.2121-2126.
- [4] S. Paranjape, M. Sutaone, P. Mukherji. "Fault Detection and recovery of Cluster heads in Mobile Wireless Sensor Networks," in TENCON, 2015, pp. 1-5.
- [5] A. S. Patil, A. Panat, S. A. Ragade. "Classification of Human Emotions from Electroencephalogram using Support Vector Machine," in International Conference on Information Processing, 2015, pp. 404-408, DOI:10.1109/INFOP.2015.7489416.
- [6] P. Pol, A. M. Deshpande. "Telemedicine Mobile System," in *Conference on Advances in Signal Processing*, 2016, pp. 484-487.
- [7] M. Panicker, T. Mitha, K. Oak, A. M. Deshpande, C. Ganguly. "Multisensor Data Fusion for Autonomous Ground Vehicle," in *Conference on Advances in Signal Processing (CASP)*, 2016, pp. 507-512.

A.Y. 2014-2015

- [1] S. Todkar, P. V. S. Shastry. "Flipping based high performance pipelined VLSI architecture for 2-D discrete wavelet transform," in International Conference on Applied and Theoretical Computing and Communication Technology (ICATCCT), 2015, pp. 832-836. DOI:10.1109/ICATCCT.2015.7456998.
- [2] A. Bhoite, P. V. S. Shastry, M. Rashinkar. "A systolic architecture-based GF (2m) multiplier using modified LSD first multiplication algorithm," in TENCON 2015 - IEEE Region 10 Conference, 2015, pp. 1-6. DOI:10.1109/TENCON.2015.7373168.
- [3] V. L. Kaundanya, A. S. Patil, A. Panat. "Performance of KNN classifier for Emotion detection using EEG signals," in IEEE conference ICCSP , Bangalore, India, 2015, pp. 1176- 1178.

- [4] S. R. Chaudhary, A. J. Patil. "Hybrid MIMO -OFDM System With Application To Image Transmission," in International Conference on Communication Information and Computing Technology (ICCICT), 2015, pp. 1-5. DOI: 10.1109/ICCICT.2015.7045708.
- [5] A. R. Khedkar, M. Murugan. "ICI Cancellation using Raised Cosine Windowing in OFDM System," in 11th IEEE India Conference (INDICON), Yashada, Pune, 2014, pp. 1-4, DOI: 10.1109/INDICON.2014.7030550.
- [6] M. S. Joshi, S. Nadgir. "Extraction of Feature Vectors for Analysis of Musical Instruments," in International Conference on advances in Electronics, Computers & communication sponsored by IEEE Computer Society Consumer Electronics Society & IEEE Bangalore Section, Reva University, Bangalore, 2014, pp. 1-6. DOI:10.1109/ICAIECC 2014.7002391.

A.Y. 2013-2014

- [1] W. D. Paliwal, P. V. S. Shastry, S. Dighade. "High performance using synchronous elastic circuits with lower overheads," in International Conference on Advances in Electronics, Computers and Communications (ICAIECC), 2014, pp. 1-6, DOI:10.1109/ICAIECC.2014.7002453.
- [2] A. S. Patil, A. Panat, G. Galgatte. "Comparison of Statistical parameters of fMRI images of Brain For The Purpose of Analysis of Emotions," in 5th International conference on advances in recent technologies in communication and computing (ARTCom), Bangalore, India, 2013, pp. 189-194.
- [3] A. Khelifi, M. Aburrous, M. A. Talib, P.V.S. Shastry. "Enhancing Protection techniques of E-Banking Security Services Using Open Source Cryptographic Algorithms," in 14th ACIS International Conference on Software Engineering, AI, Networking and Parallel/Distributed Computing (SNPD), Honolulu, USA, 2013, pp. 89-95, DOI: 10.1109/SNPD2013.47.
- [4] A. Ogale, S. R. Chaudhary, A. J. Patil. "Performance Evaluation of MIMO-OFDM system using MATLAB Simulink with Real Time Image Input," in 10th IEEE and IFIP International Conference on Wireless and Optical Communications Networks, 2013, pp.1-5, DOI: 10.1109/WOCN.2013.6616176.
- [5] S. R. Chaudhary, M. P. Thombre. "BER Performance Analysis of MIMO-OFDM System using different equalization techniques," in International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), Syed Ammal Engineering College, Ramathapuram, Tamilnadu, India, 2014, pp. 673-67. DOI: 10.1109/ICACCCT.2014.7019174

National/ International Non-Scopus Indexed Conferences

A.Y. 2024-2025

- [1] Prachi Mukherji, Dr. Seema Rajput, Nandini Nawale, Mayuri M. Pame, Navya Mishra, Vibhavari A. Narsale, “Design of a Novel Integrated Three Step Gray to Seven Segment Code Converter on Cadence Virtuoso using 45nm CMOS transistors”, 7th International Conference on "*VLSI Communication and Signal Processing (VCAS 2024)*
- [2] Prachi Mukherji, Seema Rajput, Vaibhavi Ipkal, Bhargavee Joshi, Saniya patel , Shruti Deo, “A Novel 32-bit Encryption and Decryption Method for High-Speed Non-Critical Data Applications”, OCIT 2024
- [3] Prachi Mukherji, Seema Rajput, Mruga Muthe, Alekhya, “Comparative Analysis of 2-bit Vedic and 2-bit Array Multiplier Using 45nm CMOS Technology”, *International Conference on Micro/Nanoelectronics Devices, Circuits, and Systems (MNDCS-2025)*

A.Y. 2023 - 2024

- [1] V. Kharat, S. Khatdeo, H. Kothe, R. Kshirsagar, M. Dixit, M. S. Balan, “Land cover clustering and classification of satellite images”, *First International Conference on Data Science and Advanced Computing (ICDSAC 2023)*, Jul .2023
- [2] B. Pathak, S. Balan, D. Kariya, K. More, “Non-linear gate control of the canal using flow measurement under GUI based control”, *66th Annual IETE Convention (AIC)- 2023*
- [3] S. Rajput, P. Mukherji, N. Deodhar, A. Chitnis, S. Awachat, P. Godse, “Comparative Analysis of Efficient Implementation of CNN on CPU and GPU for Image Processing and Implementation of Basic CNN Operations in Verilog”, *Microelectronics, Computing Systems, Machine Learning & Internet Of Things (Mcmi-2022)*, Dec. 2023

A.Y. 2021-2022

- [1] A. Pomane, S. Sanadi, A. Shinde, M. Borse. “Covid 19 detection using chest X-ray.” in Conf. *International Conference on the Empirical Aspects of Advancements in Science, Engineering & Technologies (ICEAASET- 2021)*,2021,pp.213-219.

A. Y. 2018-2019

- [1] P. Waghmare.“ Overview of Social Media Monitoring Tools”, in Conf *International 4th International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2018)*, 2018, pp. 1454-1456.

A. Y. 2017-2018

- [1] M. A. Dixit, A. Moholkar, S. Limaye, D. Limaye. “Statistical Based Approach for Packet Classification,” in *14th International conference on Science, Technology & Management*, Pune, India, 2017, pp. 25-31
- [2] M. V. Pathade, P. Chinchkar. “Moving Vehicle Detection and Counting to Allot Run

Time” in *Conf. International Conference on Emerging Trends in Science, Engg. and Technology*, Pune, India, 2018, pp. 1-13.

- [3] B. V. Pathak, S. Kulkarni, A. Karandikar, A. Kharwadkar. “Speaker Recognition System for Home Security using Raspberry Pi and Python,” in *Conf. International Conference on Recent Trends in Engineering & Sciences*, Vishakhapatnam, India, 2018, pp. 1-6.
- [4] D. Bayas, K. Joshi. “A novel Speech Enhancement algorithm based on Cepstral domain,” in *Conf. International IISTEM Conference*, 2018, pp.77-80
- [5] D. Bayas, K. Joshi. “A Review on Speech Enhancement Techniques,” in *Conf. International Conference on Recent Innovation in Engineering Science and Management*, 2018, pp. 1-6.

A.Y. 2016-2017

- [1] S. N. Ohatkar, S. S. Patil, P. Dhanvijay. “RF Based Smart Accident-Avoidance System,” in *5th International Conference on Engineering Technology, Science and Management Innovation (ICETSMI)*, Delhi, 2017, pp. 121-125.
- [2] S. N. Ohatkar, T. Tarade, S. Thigale, S. Surve. “A Smart Prepaid Energy Meter System with GSM Technology.” in *5th International Conference on Engineering Technology, Science and Management Innovation (ICETSMI-2017)*, Institution of Electronics and Telecommunication Engineers (IETE), Delhi, India, 2017, pp. 116-120.
- [3] B. V. Pathak, P. Hirve, Y. Gaikwad. “ Comparison between CAPTCHA Techniques for Text based, Graphics based and Audio based Text based, Graphics based and Phonemic restoration effect methods.” in *Conf. National 4th National Conference on Advancement in Communication ,Computing and Electronics Technology at Modern College*, Pune, India, 2017, pp.25-28.
- [4] M. A. Dixit, R. Ukarande. “Network traffic intrusion detection system using Fuzzy logic and Neural network.” In *International Conference on Internet of Things, Next Generation Networks and Cloud Computing 2017 (ICINC)*, Pune, India, 2017.
- [5] M. A. Dixit, R. Ukarande. “Network traffic intrusion detection system using Fuzzy logic” in *International Conference on IOT, Next generation networks and cloud computing*, 2017, pp. 1-5.
- [6] S. N Gadakh, A. S. Khade. “FPGA implementation of high-speed Vedic multiplier” in *International Conference and workshop on Electronics Telecommunication Eng.*, 2016, pp. 184-187.

A. Y. 2015-2016

- [1] J. Sadalge, A. Das, P. Mukherji. “Sediment Classification Using Side Scan Sonar Imagery,” in *Conf. International 12th Western Pacific Acoustics Conference*, 2015. pp. 445- 448.
- [2] G. Ghule, P. Mukherji. “A Novel Approach Marathi Numeral Recognition Using Bark Scale and Discrete Sine Transform Method ” in *National Conference on Advances in*

- Signal Processing (CASP)*, Pune, 2016, pp. 191-195.
- [3] S. Paranjape, S. Barani, M. Sutaone, P. Mukherji. "Intra and Inter Cluster Congestion Control Technique for Mobile Wireless Sensor Networks," in *National Conference on Advances in Signal Processing (CASP)*, Pune, 2016, pp. 450-454.
 - [4] K. G. Gunale, P. Mukherji. "Fall detection using k-nearest neighbour classification for patient monitoring." in *Conf. IEEE International Conference on Information Processing (ICIP)*, VIT, Pune, 2015, pp. 520-524.
 - [5] S. Paranjape, M. Sutaone, P. Mukherji. "Adaptive Loss Recovery Technique for Cluster based Mobile Wireless Sensor Networks." in *2nd National Conference on Recent Advancements in Futuristic Technologies (NCRAFT)*, 2015, pp.1-5.
 - [6] S. N. Ohatkar, D. S. Bormane, N. Kirwai. "Optimization of Channel Assignment for Cognitive Cellular Networks." in *National Conference on Advances in Signal Processing (CASP)*, CCOEW, Pune, India, 2016, pp. 391-396
 - [7] S. N. Ohatkar, D. S. Bormane, S. V. Bodhe. "Optimizing channel allocation techniques with GA-SVM for interference reduction in cellular networks." in *National Conference on Advances in Signal Processing (CASP)*, CCOEW, Pune, India, pp.73-83.
 - [8] S. N. Ohatkar, D. S. Bormane. "Hybrid Channel Allocation with GA and PSO to Reduce Call Blocking Probability in Cellular Network." in *Second International Conference on Information and Communication Technology for Competitive Strategies (ICTCS)*, Udaipur, Rajasthan, India, 2016, pp. 1-5.
 - [9] M. S. Borse, S. Patil. 3D Reconstruction of Brain Images from 2D MRI Images." in *International Proceeding of ICRTET*, 2015, pp. 6-10.
 - [10] M. S. Borse, S. Patil. "Classification of Brain Tissues from MRI Images Using Sphere Shaped Support Vector Machine." in the 1st *International Conference on Computing, Communication, Electrical, Electronics, Devices and Signal Processing*, 2015, pp. 188-193.
 - [11] S. Jog, M. A. Dixit. "Supervised Classification of Satellite Images." in *National Conference on Advances in Signal Processing (CASP)*, Pune, 2016, pp. 93-98.
 - [12] M. Bari, M. M. Dewasthale. "Performance Comparison of LMS algorithms for Acoustic Noise Cancellation." in *National Conference on Advances in Signal Processing (CASP)*, Pune, 2016, pp. 139-143.

A.Y. 2014-2015

- [1] M. Sawane, A. Bohite, S. Garthe, P. V. S. Shastry. "Implementation of GF 216 Multiplier Using Combinational Gates, " in *Second International Conference on Advances in Computing, Control and Networking*, 2015, pp. 17-22.
- [2] S. N. Ohatkar, D. S. Bormane. "Channel Allocation Technique with Genetic Algorithm for minimizing Call Blocking Probability in Cellular Network", in *International Conference on Industrial Instrumentation and Control (ICIC)*, Pune, India, 2015, pp. 783-788.

- [3] S. N. Ohatkar, D. S. Bormane. "An Approach for Interference Reduction in Cellular Network," in *11th International Conference on Conf. Wireless and Optical communication network (WOCON)*, Vijayawada, India, 2014, pp. 1-5
- [4] H. N. Patil, S. N. Ohatkar. "Design and Simulation of Software Defined Radio using MATLAB SIMULINK," in *11th International Conference on Conf. Wireless and Optical communication network (WOCON)*, Vijayawada, India, 2014, pp. 1-4.
- [5] S. N. Ohatkar, D.S. Bormane, "Bio-Inspired heuristic algorithm to reduce CBP in HCA of Cellular network," in *International Conference on Telecommunication Technology and Management*, Delhi, India, 2015, pp.166-171.
- [6] M. Kumbhakaran, B. Sathe-Pathak. "Analysis of Emotional State of a Person and its Effect on Speech Features using PRAAT software," in *International Conference on Computing, Communication, Control and Automation*, Pune, India, 2015, pp. 763-767.
- [7] M. Dixit, N. Bhide, S. Khankhoje, R. Ukarande. "Video Steganography" in *International Conference on Pervasive Computing (ICPC)*, Pune, India, 2015, pp. 1-4.
- [8] M. A. Dixit, A. Kulkarni, N. Raste, G.Bhandar. " Intelligent control system for Sericulture International," in *International Conference on Pervasive Computing (ICPC)*, Pune, India, 2015, pp. 1-5.
- [9] B. Sathe-Pathak, M. Sayankar, A. Panat. "Emotion Transformation from Neutral to 3 Emotions of Speech Signal using DWT and Adaptive Filtering Techniques," in *Annual IEEE India Conf. INDICON*, Pune, India, 2014, pp. 1-5.

A.Y. 2013-2014

- [1] A. Panat, A. Patil, G. Deshmukh. "Comparison of features of EEG Signals for different emotions," in *Conf. ICEECE*, Pune, India, 2014, pp. 1-5.
- [2] V. Waghmare, S. Ohatkar. "GA Based Channel Allocation Technique for Interference Reduction in Cellular Network, " in *Conf. Innovation in Electronics and Communication Engineering*, Hyderabad, India, 2013, pp.136-141.
- [3] S. Ohatkar, D. Bormane. "Channel Allocation Technique with Genetic Algorithm for Interference Reduction in Cellular Network," in *Annual IEEE Conf. INDICON*, Bombay, India, 2013, pp. 1-6.
- [4] S. Ohatkar, M. Gaopande, S. Deshpande, C. Joshi. "Energy efficient unobtrusive monitoring of sensors," in *Conf. on Recent Trends in Engineering and Technology*, Mumbai, India, 2014, pp. 529-533.
- [5] S. Ohatkar, M. Gaopande, S. Deshpande, C. Joshi. "Energy efficient Unobstructive Monitoring using Bluetooth low energy," in *Conf. Helios Department of Energy Science and Engineering*, Mumbai, India, 2014, pp. 1-6.
- [6] S. Ohatkar, V. Ganore, P. Darekar, P. Harpale. "MEMS Based Piezoresistive Pressure Sensor for Aerospace Applications" in *Conf. TECHNOVISION- First International conference on E&TC Electrical and computer engineers*, Pune, India, 2014, pp. 1-5.
- [7] B. Pathak, M. Sayankar. "Conversion of Emotion in Speech Signal using DWT &

Adaptive Filtering” in *Conf. ICEECE*, India, 2014, pp. 38-42.

- [8] P. Katule, B. Pathak. “Voice Conversion using Spectral Mapping Techniques,” in *International Academic conference on Electrical Electronics & Robotics*, Pune, India, 2013, pp. 128-133.
- [9] S. Borse, M. Dixit. “Migration of Internet Protocol V4 to Internet Protocol V6 using dual stack techniques,” in *International Conference on Electrical, Electronics & Telecommunication*, India, 2014, pp. 49-53.
- [10] S. Bavkar, S. Sahare. “PCA based single channel speech enhancement method for highly noisy environment, ” in *International Conference on Advances in Computing, Communications and Informatics*, India, 2013, pp. 1103-1107.

Books

- [1] Dr. Makarand Velankar, Dr. Mrs. M.S. Borse, Dr. Anjali Naik, *Entrepreneurship Journey from Idea to Startup*, ISBN: 978-93-5563-837-3, Tech knowledge publication
- [2] Manoj S. Nagmode, Vinayak. K. Bairagi, Ravindra Honaji Borhade, *Epileptic Seizure Prediction Using Electroencephalogram Signals*, December 19, 2024
ISBN : 9781032714394, Chapman & Hall
- [3] M. Ansari, R. Borhade, R. Borhade, T. Londhe, R. Kale, A. Bhise, *Software Engineering*, Sep. 2023, ISBN: 978-935563-571-6 (A. Y. 2023-24)
- [4] S. Ohatkar, R. Borhade, S. Barekar, C. Athavale, *Machine learning and It's Applications*, Jan. 2024, ISBN: 9789360103866 (A. Y. 2023-24)
- [5] S. Ohatkar, R. Borhade, S. Nichale, *Deep Learning for Beginners*, Mar. 2024, ISBN : 9789360104801 (A. Y. 2023-24)
- [6] S. H. Rajput, M. M. Patil, and A. Jain, *Integrated Circuits*. Gigatech Publishing House, Pune, 2018. (A. Y. 2018-19)

Book Chapters

- [1] A. Oak, I. Patil, A. Phansalkar, A. Deshpande, S. Sharangpani, “Design of Smart Digital Crop Harvester Monitoring Cluster”, *Digital Agricultural Ecosystem: Revolutionary Advancements in Agriculture*, Apr. 2024, ISBN: 9781394242931 Publisher: Wiley (Scrivener Publishing) (Scopus) (A. Y. 2023-2024)
- [2] E. Priyadarshini, A. Deshpande, A. More, S. Pate, “Analysis of Sea Surface Temperature and Chlorophyll-a Concentration Along the Coastline of the Indian Peninsula Using Remote Sensing Data”, *Geo-Environmental Hazards using AI- enabled Geospatial Techniques and Earth Observation Systems*, May 2024, eISBN: 978-3-031-53763-9 Publisher: Springer Cham. (Scopus) (A. Y. 2023-2024)
- [3] A. Kumari, S. Rajput, A. Jain, S. Kumar, “AI-Based Digital Technologies In Smart Universities”, *Ai-Based Digital Technologies In Smart Universities (Chapter-4)*, DOI:<http://dx.doi.org/10.1201/9781003300458-5> (A. Y. 2022-2023)
- [4] K. Kumbhar, P. Mukherji, “Software-Defined Networking: Research Challenges”, *Artificial Intelligence in Information and Communication Technologies, Healthcare and Education*, Dec. 2022, DOI: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003342755-9/software-defined-networking-kalpana-kumbhar-mukherji-prachi> (A. Y. 2022-2023)
- [5] A. Patil, “Study on Seizure Detection from the Features of EEG Signals, ” in *New Approaches in Engineering Research*, Vol. 16, Ed. Dr. P. Elangovan, Book Publisher International, Oct. 2021, pp. 72-78. ISBN 978-93-5547-0690 (Print), ISBN 978-93- 5547-070-6 (eBook), DOI: 10.9734/bpi/naer/v16 (A. Y. 2021-22)
- [6] H. Solomon, R. Borhade and S. Barekar, “Role of Information and Communication Technology in Retail Innovativeness, ” in *Disruptive Technology, Industry 4.0, Advances in management, I.T. and Social Science*, INSC International Publishers, Ed. L. Ghosh, A. Mirza, N. Khalufi, S. Chakraborty, and C. S. Singh, 2021, pp. 67-72. ISBN: 978-1-68576-209-4 (A. Y. 2021-22)
- [7] P. Mukherji, and P. Rege, “Devanagari Script Recognition: Technique and Challenges” in *Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies*, Chapter 14, IGI Global Publisher, Ed. V. Mago and N. Bhatia, Dec. 2011, pp. 249-269. ISBN13: 9781613504291, DOI: 10.4018/978-1-61350-429-1