

Research Publications

Research Centre: - Computer Engineering

1. Patents:

Sr No	Name of Staff	Title	Date of Application	Design Number	Patent Office Journal No	Publication date
1	1.Swati Krishna Bhavsar 2.Dr. Varsha Hemant Pati	IoT Based System for Computing Human Density for Critical Situation Recognition and Precaution for Avoiding Accidents	22/12/2017	430006		1/1/2024
2	1. Geetanjali Kale 2. Dr. Varsha Patil	System and method for motion analysis and feedback for amendment of human action	30/08/2016	491733		29/12/2023
3	Mr.Abhijeet Dinkar Cholke	A Mutual Authentication Framework Using AES-RSA Hybrid Cryptography for Secure Access Control in Decentralized Storage Systems	10/08/2025	202521075999 A	34/2025	22/08/2025
4	Alpana Borse	4HAN: HYPERGRAPH BASED HIERARCHICAL ATTENTION NETWORK FOR FAKE NEWS CLASSIFICATION AND PREDICTION	15/07/2024	202421053765 A	32/2024	09/08/2024
5	Alpana Borse	ML based Fake News Detection Device	11/07/2024	422940 - 001 A		23/08/2024
6	Swati Krishna Bhavsar Dr. Varsha Hemant Pati	IoT Based System for Computing Human Density for Critical Situation Recognition and Precaution for Avoiding Accidents	22/12/2017	430006		1/1/2024
7	Praveen Andhale Dr.Varsha Patil Shital Wagh Dr.Swati Bhavsar	Protection box for electric switch	23/07/2024	424284001		11/02/2025

2. Research Scholar Publications in Journals:-

	Title of paper	Name of the author/s	Name of Journal	Year of Publication	ISSN number	Link to the recognition in UGC enlistment of the Journal /Digital Object Identifier (doi) number		
						Link to website of the Journal	Link to article/paper/abstract of the article	UGC/SCOPUS/SCI/WoS/etc
1	Comprehensive Study of Ophthalmic Diseases: Insights, Challenges, and Innovations	Shraddha S. Shinde, Dr. Swati A. Bhavsar	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	2026	2168-1163	www.tandfonline.com/journals/tciv20	https://doi.org/10.1080/21681163.2024.2380091	eSCI, WoS, Scopus (Q2)
2	A review of data management and protection schemes in blockchain-integrated internet of thing systems	Abhijeet Cholke, V. V. Mandhare, and P. S. Vikhe	Discrete Mathematics, Algorithms and Applications	2025	1793-8317	https://www.worldscientific.com/worldscinet/dmaa	https://www.worldscientific.com/doi/10.1142/S1793830925501204	Scopus, WoS(ESCI)
3	3d Image Annotation Using Deep Learning And View-Based Image Features: A Comprehensive Review	Farhat A. Patel, Varsha H. Patil	Advances in Nonlinear Variational Inequalities	2025	1074-133X	https://internationalpubs.com/index.php/anvi/article/view/4137	https://internationalpubs.com/index.php/anvi/article/view/4137	scopus
4	Deep Learning-Powered Approaches for News Authenticity Verification and Fake News Detection: A Comprehensive Survey	Alpana Borse	Advances in Nonlinear Variational Inequalities	April 2025	ISSN: 1092-910X	Vol 28 No. 7s (2025)	https://internationalpubs.com/index.php/anvi/article/view/4489/2483	scopus
5	4HAN: hypergraph-based hierarchical attention network for fake news prediction	Alpana Borse	International Journal of Electrical and Computer Engineering (IJECE)	April 2025		doi:10.11591/ijece.v15i2 Volume 15 Issue 2, April 2025,	https://ijece.iaescore.com/index.php/IJECE/article/view/36935/18138	scopus
6	Design Fake News Prediction-Classification using 4 HAN and Hypergraph – Neural Network	Alpana Borse	International Journal of Computer Science and Information Security (IJCSIS)		ISSN 1947-5500	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043857	https://drive.google.com/file/d/1PclHXddlovMIDJ4Qw_C4t7JtY2Gdpk4p/view	scopus
7	Machine Learning Approach for Predicting Epileptic Seizures using EEG Signals: A Review	Praveen Andhale	Proceedings of the 3rd International Conference on Contents, Computing & Communication (ICCCC-2022)	6 Apr 2022		https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043861	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043861	scopus

3. Research Scholar Presentations in Conference:-

Sr No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	A Review of Security and Information Control in Blockchain-Integrated IoT Applications	Abhijeet Cholke; V.V.Mandhare; P.S.Vikhe	Computer Engineering	IEEE Explorer	2025	ISBN:979-8-3503-5434-8		https://doi.org/10.1109/ICBDS61829.2024.10837192	Scopus	A Review of Security and Information Control in Blockchain-Integrated IoT Applications
2	Designing efficient algorithms for seamless integration of blockchain-based data management in IoT applications	Abhijeet Cholke; V.V.Mandhare; P.S.Vikhe	Computer Engineering	Taylor & Fransics	2025	ISBN 9781041302339		https://www.routledge.com/Connecting-Intelligence-Trends-in-Computation-and-Data-Communication/Virdee-Ali-Anguera-Tripathy/p/book/9781041302339	Scopus	Designing efficient algorithms for seamless integration of blockchain-based data management in IoT applications
3	A Comprehensive Survey on Recommendation Frameworks: Techniques, Challenges, and Future Directions	Prranjali Jadhav, Varsha H Patil	Computer Engineering	ICT Systems and Sustainability Springer, Cham	2025	Online ISBN 978-3-032-06674-9	https://link.springer.com/book/10.1007/978-3-032-06674-9	https://link.springer.com/chapter/10.1007/978-3-032-06674-9_32	Scopus	A Comprehensive Survey on Recommendation Frameworks: Techniques, Challenges, and Future Directions

4	A research paper recommendation system based on large language models	Shilpa Adke,Swati Bhavsar	Computer Engineering	CONFERENCE ON ADVENT TRENDS IN COMPUTATIONAL INTELLIGENCE AND COMMUNICATION TECHNOLOGIES: ICATCICT2024	2025	978-0-7354-5229-9	https://doi.org/10.1063/1.50037031	https://pubs.aip.org/aip/acp/article-abstract/3327/1/010001/3357078/Pre-face-The-First-International-Conference-on?redirectedFrom=fulltext	Scopus	A research paper recommendation system based on large language models
5	An Integrated Hypergraph Convolution Attention Neural Network for Multi-Task News Classification and Detection	Alpana Borse	Computer Engineering	International Conference on Future Technologies 2025	2025		10.1109/ICFT66708.2025.11336675	https://drive.google.com/file/d/1aTv-z5OpU09L1xdG1WmU5NtJrmPjNmsi	Scopus	An Integrated Hypergraph Convolution Attention Neural Network for Multi-Task News Classification and Detection
6	Enhancing News Classification and Authenticity with a Deep Learning Hypergraph-Based Hierarchical Attention	Alpana Borse	Computer Engineering	Frontiers of Innovation: Exploring Emerging Technologies and Computing		e-ISBN: 978-81-973215-9-7, DOI: 10.17492/jpi.pcept.022501		https://www.journalpressindia.com/website/pccoer-icetc2025/special-issue	Scopus	Enhancing News Classification and Authenticity with a Deep Learning Hypergraph-Based Hierarchical Attention
7	Advancements in Deep Learning classification and Severity Prediction :A Comprehensive Survey(till 2025)	Ashwini Bhavsar	Computer Engineering	International Conference on Collaborative research in Education, Social Sciences ,Humanities,Engineering,and Technology(I2CRET)	2025			https://drive.google.com/file/d/1bjerBoLlugwtdSB7J5xFyEt_LYjpgfBs/view?usp=drive_link	Scopus	Advancements in Deep Learning classification and Severity Prediction :A Comprehensive Survey(till 2025)

8	Machine Learning Approach for Predicting Epileptic Seizures using EEG Signals: A Review	Praveen Andhale	Computer Engineering	Proceedings of the 3rd International Conference on Contents, Computing & Communication (ICCCC-2022)	6 Apr 2022		https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043861	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4043861	Scopus	Machine Learning Approach for Predicting Epileptic Seizures using EEG Signals: A Review
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