



ಶರಣಬಸವ
SHARNBASVA
ಕಲಬುರಗಿ - ೫೮೫ ೧೦೩



ವಿಶ್ವವಿದ್ಯಾಲಯ
UNIVERSITY
KALABURAGI - 585 103



A State Private University approved by Govt. of Karnataka vide Notification No. ED 144 URC 2016 dated 29-07-2017
Recognised by UGC under Section 2f vide No. F.8-29/2017 (CPP-I/PU), dated 20-12-2017 & AICTE, CoA, PCI New Delhi

Faculty of Engineering & Technology (Exclusively for Women)

Department of Artificial Intelligence and Machine Learning

Personal Details	
Name: Dr. Suma S	
Designation: Associate Professor	
Department: Computer Science and Engineering	
College Address: Sharnbasveshwara Institutions Campus, Vidya Nagar, Kalaburagi 585103	
Contact: 9740888182	
E-mail id: sn.suma05@gmail.com	

Areas of Interest	Wireless Sensor Networks
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Subjects Taught	
UG	PG
Computer Networks	Wireless Networks & Mobile Computing
Data Structure	Research Methodology
Design and Analysis of Algorithms	Cloud Computing
Data Mining	English for Research Paper Writing
Software Engineering	
Internet of things	
Cryptography	
Ad Hoc Networks	
Python	
Machine Learning	
Discrete Mathematics Structures	
Compiler Design	
Graph Theory	

Academic Background				
Degree	Specialization	Name of the Institute	University	Month and Year of Passing
Ph. D.	Wireless Sensor Network	PDACEK	VTU	July 2023



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PG (M. Tech.)	Computer Network Engineering	Visvesvaraya Technological University, Belagavi	VTU	October 2013
UG (B. Tech. / BE)	Computer Science and Engineering	Appa Institute of Engineering & Technology, Kalaburagi	VTU	September 2009

Work Experience							
Name of the Institution		Position		From		To	
Faculty of Engineering and Technology Exclusively for Women		Associate Professor		02/06/2026		Till Date	
CMR Technical Campus, Hyderabad Telangana		Associate Professor		21/03/2023		08/05/2026	
PDACEK		Assistant Professor (Guest Lecturer)		02/05/2013		31/12/2022	
Total Experience	12 Yrs	Teaching	12 Yrs	Research	06 years	Administration	

Research Publications					
Total Number of Publications	International Journal	National Journal	International Conference	National Conference	Total
	1	-	20	-	32
Recent Publications (Journals)					
1. "Next-generation residential energy management: A web-based self-hosting solution. Asian Journal of Water, Environment and Pollution 025050028. https://doi.org/10.36922/AJWEP025050028					
2. "An adaptive energy detection scheme using estimation of noise uncertainty for cognitive radio". Int. j. inf. tecnol. (2025).24 May 2025, International Journal of Information Technology(Singapore).Volume 17,ISSN:2511-2112, ISSUE 6 https://doi.org/10.1007/s41870-025-02551-8					
3. "Enhanced Brain Tumor Detection from MRI Scans Using Frequency Domain Features and Hybrid Machine Learning Models". Journal of Modern Technology, Volume- 1(issue-2), page number 141-149 https://review.journal-of-modern-4 . "OntoBlock: a novel ontological-base					
4. "OntoBlock: a novel ontological-based and blockchain enabled spectrum sensing framework for detection of malicious users in cognitive radio internet of Things (CR- IoT) networks". Int. j. inf. tecnol. (2024). Vol 16 issue 5, pages 3913-3921, ISSN:2511 2104E-ISSN:2511-2112, https://doi.org/10.1007/s41870-024-02011-9 , Springer Nature Link					
5. "An approach for liver cancer detection from histopathology images using hybrid pre- trained					



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models”, TELKOMNIKA Telecommunication Computing Electronics and Control p 401 Vol. 22, No. 2, April 2024, pp. 401~412 ISSN: 1693-6930, http://doi.org/10.12928/telkomnika.v22i2.25588
6. “An Optimized routing scheme for congestion avoidance using mobile nodes in Wireless Sensor Network”, Measurement: Sensors Journal Elsevier, Volume 24,ISSN: 2665-9174 https://doi.org/10.1016/j.measen.2022.100457
7. “An Effective Congestion Control Approach through Route Delay Estimation Using Packet Loss in Wireless Sensor Network”, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-1C, May 2019 https://www.ijrte.org/wp-content/uploads/papers/v8i1C/A10190581C19.pdf
8. “Congestion Control for Multihop Transmission in WSN Using Contention Window, International Journal of Advanced Science and Technology”, Vol.29No.05(2020),13697 – 13703, Retrieved from http://sersc.org/journals/index.php/IJAST/article/view/32599
9. “An approach to detect black hole attack for congestion control utilizing mobile nodes in wireless sensor network”, Science Direct -Materials Today: Proceedings, Materials Today: Proceedings, Volume 56, Part 4,2022,Pages 2256-2260, ISSN 2214- 7853, https://doi.org/10.1016/j.matpr.2021.11.590
10. “Automating E Governance Services Using Artificial Intelligence”, International Journal For Innovative Engineering and Management Research, Volume-12, Issue-4 April 2023 Page No: 1122-1129 https://www.ijiemr.org/downloads/paper/Volume-12/automating-e-governance-services-using-artificial-intelligence , ISSN 2456 – 5083
11. “A Comparative Study on Fake Job Post Prediction Using Different Data Mining Techniques”, INDIAN JOURNAL OF TECHNICAL EDUCATION Volume 46 I Special Issue I November 2023, ISSN 0971-3034
Recent Publications in Book Chapters and Conference
1. “Novel Approach for Monitoring and Controlling Energy in Smart Homes”. Proceedings of Sixth International Conference on Computer and Communication Technologies. IC3T 2024. Lecture Notes in Networks and Systems, vol 1357. Springer, Singapore. https://doi.org/10.1007/978-981-96-7477-0_47 ,ISBN978-981-96-7477-0
2. “Rapid Implementation of the Cloud Data Mining Algorithm Through Hadoop for Massive Datasets Utilizing the HDFS Files System”. Lecture Notes in Networks and Systems, vol 1230. Springer, Cham. https://doi.org/10.1007/978-3-031-78943-4_36 ,ISBN978-3-031-78942-7,volume 1230
3. “Employing a Computational Learning Technique: Tumour Detection and Classification on MRI Images.” Proceedings of the 15th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2023). SoCPaR 2023. Lecture Notes in Networks and Systems, vol 1243. Springer, Cham. https://doi.org/10.1007/978-3-031-81080-0_40 , ISBN978-3-031-81080-0
4. “PCOS Screening Using Machine Learning and Ensemble Learning Techniques in a Smart Way”. ICISSC 2024. Smart Innovation, Systems and Technologies, vol 417. Springer, Singapore



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Published 2025. https://doi.org/10.1007/978-981-97-8355-7_6 ,ISBN 978- 981-97-8354-0
5. “Design of an Automated Smart Waste Management Systems Using CNN”. ICMEET 2023. Lecture Notes in Electrical Engineering, vol 1281. Springer, Singapore. https://doi.org/10.1007/978-981-97-8422-6_23 , 11 December 2024,ISBN978-981-97-8422-6
6. “Congestion Control and Avoidance Scheme Using Mobile Nodes in Wireless Sensor Network”.ICDSAI 2023. Springer Proceedings in Mathematics & Statistics, vol 438. Springer, Cham. https://doi.org/10.1007/978-3-031-51163-9_32 , ISBN 978-3-031-51163-9
7. “Congestion Control Algorithms for Traffic and Resource Control in Wireless Sensor Networks” ,Springer ,NCCSIGMA-2019,Pages 750-758 Available: https://link.springer.com/chapter/10.1007/978-3-030-24322-7_88
8. ‘Dynamic Shortest Path Routing Algorithm to Reduce Retransmission and Congestion Avoidance for Mobile Nodes in Wireless Sensor Network’. In: Joby, P.P., Balas, V.E., Palanisamy, R. (eds) IoT Based Control Networks and Intelligent Systems. Lecture Notes in Networks and Systems, vol 528. Springer, Singapore., ISBN:978-981-19- 5844-1, https://doi.org/10.1007/978-981-19-5845-8_46 ISBN:978-981-19-5844-1
9. A CNN Transformer Hybrid Framework to Multi-Class Brain Tumor Localization by MRI images. Proceedings of the International Conference on AI-Driven Smart Systems and Ubiquitous Computing (ICAUC-2026)IEEE Xplore Part Number: CFP266AK ART; ISBN: 979-8-3315-5851-2. IEEE. DOI: 10.1109/ICAUC68182.2026.11441113
10. An Innovative Machine Learning Algorithm Driven by Artificial Intelligence for a Security Application Modeling. In: Kumar, A., Gunjan, V.K., Senatore, S., Hu, YC. (eds) Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications- Volume 1. ICDSMLA2024 2024. Lecture Notes in Electrical Engineering, vol 1528. Springer, Singapore. https://doi.org/10.1007/978-981-95-5831-5_40
11. “Congestion Control Using Link Estimation and Energy Aware in Wireless Sensor Network”. Pertanika Proceedings, Volume 1, Issue 5, 2025 DOI: https://doi.org/10.47836/pp.1.5.004 ISSN e-ISSN 3083-9475 Article ID PP(5)- 004-2025
12. “Cybersecurity Approaches to Preventing Counterfeiting in Digital Products”, Pages 1126 - 11312024 2nd IEEE International Conference on IoT, Communication and Automation Technology, ICICAT 2024Gorakhpur23 November 2024through 24 November 2024, ISBN 979-835036810-9, DOI: 10.1109/ICICAT62666.2024.10923181
13. “A Comprehensive Analysis of Human Action Recognition for Noisy Videos Using CNN and LSTM”, 23 January 2025,Page(s):1 - 8,2024 International Conference on Innovation and Novelty in Engineering and Technology (INNOVA) Electronic ISBN:979-8-3315-0513-4, DOI: 10.1109/INNOVA63080.2024.10847008
14. “The use of Integration of H Level Communication with the Extended Identity Power Process to Have Intelligent Vehicles: An Empirical Review”,2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) 10.1109/ICACITE60783 2024.10617048,ISBN:979-8-3503-6017-2



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15. “Modelling Soil Fertilizer Levels and Crop Yields in Agriculture Using Machine Learning”, 2023 International Conference on Integrated Intelligence and Communication Systems (ICIICS), Kalaburagi, India, 2023, pp. 1-6, doi: 10.1109/ICIICS59993.2023.10421341. Electronic ISBN:979-8-3503-1545-5
16. “DWT Approach Based on Analysis of Seizures in EEG Signal”, 2023 International Conference on Integrated Intelligence and Communication Systems (ICIICS), Kalaburagi, India, 2023, pp. 1-5, doi: 10.1109/ICIICS59993.2023.10421254. Electronic ISBN:979-8-3503-1545-5
17. “Hybrid Optimization Algorithm for Effective Clustering Algorithm and Routing Protocol in MANET,” 2023 International Conference on Evolutionary Algorithms and Soft Computing Techniques (EASCT), Bengaluru, India, 2024, pp. 1-5, doi: 10.1109/EASCT59475.2023.10392304. Electronic ISBN:979-8-3503-1341-3
18. “An Advanced Analysis of Disease Prediction and Prevention Using Machine Learning”, 2023 IEEE 5th International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA), Hamburg, Germany, 2023, pp. 37-40, doi: 10.1109/ICCCMLA58983.2023.10346737. Electronic ISBN:979-8-3503-3828-7
19. “A Prediction of Water Quality Analysis Using Machine Learning”, IEEE Scopus International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), 21 June 2023, DOI: 10.1109/ICDCECE57866.2023.10150940, https://ieeexplore.ieee.org/abstract/document/10150940 ,Electronic ISBN:979-8-3503-4745-6
20. “Detection of malicious activity for mobile nodes to avoid congestion in Wireless Sensor Network”., 2022 IEEE Fourth International Conference on Advances in Electronics, Computers and Communications (ICAIECC), 2022, pp. 1-6, https://doi.org/10.1109/ICAIECC54045.2022.9716673 Electronic ISBN:978-1-6654-0239-2, ISBN: 2642-6595

Memberships in Professional Bodies	
Sl. No.	Name of the Professional Body
1.	IEEE Professional Member
2.	Life Member, Indian Society for Technical Education (ISTE), New Delhi
3.	Life Member, Institution of Engineers (India).
4.	Life Member, Institute of Scholars.

Programs Organized



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1.	Co-Convener for the International Conference on Computer Security, Image Processing, Graphics, Mobility, and Analytics (ICCSIGMA-2025), sponsored by ANRF/SERB. At CMRTC
Sl. No.	Training Programmes Attended
1.	Two Weeks National level AICTE sponsored ATAL Advanced Faculty Development Program (FDP) on, "Enhancing Diagnostic Precision: A Deep Learning-Powered Intelligent System for Retinal Vein Occlusion Diagnosis", from 09-12-2024 to 21-12- 2024 at G. Narayanamma Institute of Technology and Science, Autonomous (For Women).
2.	Educator Training Certificate for completing the Alteryx SparkED Educator Training on FOUNDATION MICRO - CREDENTIAL & DESIGNER CORE by EduSkills
3.	AICTE Training And Learning (ATAL) Academy Faculty Development Program on The Revolution of Large Language Models (LLMs) in Artificial Intelligence at VIDYA JYOTHI INSTITUTE OF TECHNOLOGY from 18/11/2024 to 23/11/2024. Matrusri Engineering College
4.	Completed certificate on Innovation Ambassador (IA) training Reskilling by MoE's Innovation cell and AICTE during IIC
5.	Completed certificate on Innovation Ambassador (IA) training 'Advanced Level' by MoE's Innovation cell and AICTE during IIC

Special Lectures Presented

1.	Resource Person for a One-Day National Level Comprehensive Workshop on "Writing Skills, Gap Analysis, Plagiarism, Tools and Publication Techniques" conducted by Bharat Ratna Indira Gandhi College of Engineering, Solapur. Delivered a session titled "Tools for High-Impact Writing and Ethical Rephrasing" on 30th December 2025.
2.	Resource Person for UGC-Malaviya Mission Teacher Training Centre, JNTUH, Two- Week Online Refresher Course on "Biometrics Security in the Generative AI Era." Topic: Presented a session on "Liveness Detection: Concepts and Techniques" to 162 faculty members from various technical disciplines across India. Date: August 11, 2025.
3.	Conducted a Research-oriented seminar on "How to write a Paper on Research Work" at CMR Technical Campus, Hyderabad, Telangana for faculty and M.Tech Students.
4.	Conducted a webinar on "Application and Trends in Data Mining organised by the computer science and engineering department at Brindavan College of Engineering Dwaraka Nagar, Bengaluru, Main Road, Yelahanka, Bengaluru-560063, Karnataka, India

Role & Responsibilities

1.	
2.	



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3.	
4.	