



LINGARAJ APPA ENGINEERING COLLEGE , BIDAR

Approved by AICTE, Recognized by Govt. of Karnataka

FACULTY PROFILE

1. **Name in Full:** Sadhana Choudhary



2. **Contact Number:** 9739666394

3. **Email ID:** sadhanachdhr@gmail.com

4. **Date of Birth:** 13/02/1969

5. **Address for communication:** Electronics and Communication Engineering Dept, Lingaraj Appa Engineering College, Bidar. Karnataka, 585403.

6. **Educational Qualifications:**

Sl.NO	Degree	University/Institution	Year	Department/Subject/field	Status (Completed/Pursuing)
1	Ph.D	VTU,Belgavi	2015	Electrical engineering	Pursuing
2	M.Tech	VTU,Belgavi/ PDA college of Engg. Gulbarga	2002	Power Electronics	Completed
3	B.E	Marathwada University Aurangabad / shymalal college of Engg.Udgir	1992	Electronics	Completed

7. Details of Employment:

Nature of Service	Experience	
	Years	Months-
Engineering College Teaching	23	00
Polytechnic College Teaching	05	00
	28	

8. **Date of service in this Institution:** 01/08/2013

9. **Total Experience in years:** 28 years

10. **Subjects of Interest:** Analog Circuits, Electronic Devices, HDL, Power Electronics, Antennas Wave Propagation , Microcontroller, Microprocessor, Digital communication, Analog Communication, Control System and Network Analysis

Publications in National and International Journals & Conferences:

- “A Comparative Analysis of Binary Arithmetic Codes.” International Conference on “Industry 4.0 Technology,” Vishwakarma Institute of Technology, Pune, February 2020.
- “Amorphous Slack Methodology for Autonomous Fault Handling in Memory and Image Processing Applications.” IJSR, Volume 4, Issue 5, May 2015.
- “An Optimized RR-TCAM Array Design Based on Reversible Elements.” International Journal & Magazine of Engineering Technology, Management and Research, May 2015.
- Soumya Raga, Sadhana C., Basavalinga Swamy (2020). “An Efficient Adaptive Binary Range Coder and Its VLSI Architecture.” International Journal of Information Technology and Electrical Engineering, ISSN: 2306-708X, Volume 9, Issue 4, August 2020.
- Bashetty Pallavi, Basavalinga Swamy, Sadhana C. (2020). “Open Stubs Loaded Rectangular Microstrip Antenna.” Journal of Advanced Research in Information Technology, Systems & Management, Volume 4, Issue 2, 2020, pp. 1–7. Peer-Reviewed Journal.
- Syed Arif Ali, Basavalinga Swamy, Sadhana C. (2020). “Design and Simulation of a Microstrip Patch Antenna Array Using ANSYS HFSS for Zigbee and WiMAX Applications.” Journal of Advanced Research in Networking and Communication Engineering, Volume 3, Issue 2, 2020, pp. 19–23. Peer-Reviewed Journal.
- Aishwarya, Basavalinga Swamy, Sadhana C. (2023). “Arduino Based Smart Fertilizer Management System.” Journal of Control and Instrumentation Engineering, Volume 9, Issue 3, 2023, e-ISBN: 2582-3000.

- h. Raaziya Banu, Basavalinga Swamy, Sadhana C. (2023). "Smart Farm Fertilizer and Pesticide Prediction Using IoT." *Journal of Instrumentation and Innovation Sciences*, Volume 8, Issue 3, 2023, e-ISBN: 2456-9860.
- i. Navinkumar, Sadhana C., Basavalinga Swamy (2023). "Low Power High Order Approximate Multiplier Using Approximate High Order Compressor." *National Conference on Advances in Electronics, Communication & Computing (NCAECC-2023)*, organized by the Department of ECE, GNDEC, Bidar, during 13th–14th May 2023.
- j. Suman, Sadhana C., Basavalinga Swamy (2023). "Towards an Automated Design Flow for Memristor." *National Conference on Advances in Electronics, Communication & Computing (NCAECC-2023)*, organized by the Department of ECE, GNDEC, Bidar, during 13th–14th May 2023.
- k. Raaziya, Basavalinga Swamy, Sadhana C. (2023). "A Study of 7T SRAM for Low Power Application." *National Conference on Advances in Electronics, Communication & Computing (NCAECC-2023)*, organized by the Department of ECE, GNDEC, Bidar, during 13th–14th May 2023.
- l. Aishwarya, Basavalinga Swamy, Sadhana C. (2023). "A Study of Two-Stage Operational Amplifier." *National Conference on Advances in Electronics, Communication & Computing (NCAECC-2023)*, organized by the Department of ECE, GNDEC, Bidar, during 13th–14th May 2023.
- m. Sweta, Dr. Basavalinga Swamy, Sadhana C. (2024). "Synthesis of Hidden State Transitions for Sequential Logic Locking." *Journal of Control and Instrumentation Engineering*, e-ISSN: 2582-3000, Volume 10, Issue 3 (September–December 2024), pp. 28–34.
- n. Rekha, Dr. Basavalinga Swamy, Sadhana C. (2024). "An Artificial Neural Network Architecture Based on Reversible Logic." *Journal of Optoelectronics and Communication*, Volume 7, Issue 1. DOI: <https://doi.org/10.5281/zenodo.14556915>
- o. Praveen Kumar, Dr. Basavalinga Swamy, Sadhana C. (2025). "ASPI Protocol Design in Verilog and Simulation." *Journal of Advanced Research in Analog and Digital Communications*, Volume 2, Issue 3 (September–December 2025), pp. 21–29, e-ISSN: 3048-9172.
- p. Ambika S. G., Basavalinga Swamy, Sadhana C. (2025). "Social Media Forensics: An Adaptive Cyberbullying-Related Hate Speech Detection Approach Based on Neural Networks with Uncertainty." *2nd International Conference on Multidisciplinary Research (ICMR-2025)*, organized by the Faculty of Engineering and Technology, Sharanbasava University, Kalaburagi, in association with Lingaraj Appa Engineering College, Bidar, during 29th–30th July 2025.
- q. Ambika, Basavalinga Swamy, Sadhana C. (2025). "A Hybrid Ensemble and Explainable AI Model for Thyroid Disease Diagnosis Using Clinically Validated Features." *2nd International Conference on Multidisciplinary Research (ICMR-2025)*, organized by the Faculty of Engineering and

Technology, Sharanbasava University, Kalaburagi, in association with Lingaraj Appa Engineering College, Bidar, during 29th–30th July 2025.

- r. Shivangi, Basavalinga Swamy, Sadhana C. (2025). “An Artificial Intelligence-Based Early Detection of Dengue Using CBC Data.” 2nd International Conference on Multidisciplinary Research (ICMR-2025), organized by the Faculty of Engineering and Technology, Sharanbasava University, Kalaburagi, in association with Lingaraj Appa Engineering College, Bidar, during 29th–30th July 2025.

11. Books published : No

12. Workshop/Seminar Conducted FDP Attended /:

- a. FDP on “IoT and Its Applications,” 5 days, from 05-12-2022 to 09-12-2022, organized by the Department of EEE, GNDEC, Bidar.
- b. FDP on “Idea Generation Methods,” 3 days, from 10-01-2023 to 12-01-2023, organized by ICT Academy at Sharanbasava University.
- c. FDP on “Microsoft Power BI Data Analyst Associate,” 5 days, from 10-06-2024 to 14-06-2024, organized by Lingaraj Appa Engineering College, Bidar.
- d. FDP on “Inculcating Universal Human Values in Technical Education,” 3 days, from 06-11-2023 to 08-11-2024, organized by AICTE at Lingaraj Appa Engineering College, Bidar.
- e. FDP on “Symposium on Emerging Trends in 6G Technologies,” 5 days, from 16-12-2024 to 20-12-2024, organized by the Department of Electronics & Telecommunication Engineering, AISSMS Institute of Information Technology, Pune.
- f. FDP on “AI Mastery for Educators,” 22 days, from 15-05-2025 to 07-06-2025, organized by Vishlesan i-HUB, IIT Patna.
- g. FDP on “Artificial Intelligence and Machine Learning,” 5 days, from 26-12-2025 to 30-12-2025, organized by the Department of ECE, LAEC, Bidar.
- h. FDP on “Emerging Trends in Artificial Intelligence for Smart Innovation and Sustainable Technologies in Industry 4.0,” 5 days, from 01-09-2025 to 06-09-2025, organized by PDA College of Engineering, Kalaburagi. College Of engineering Raichur from 08/09//2025 to 12/0/09/2025

13. Details of Memberships in Professional Societies:

- a) Member, Life time member of Indian Society for Technical Education. LM- 138729
- b) Member, The Institution of Electronics and Telecommunication Engineering.M-502154
- c) IEEE Professional member 93684920

14. Student Guided:

10 PG students and 4 group of UG students.