

CURRICULUM VITA

- 1) Name : Dr. Pawar Aparna Madhukar
- 2) Educational Qualification : M.Sc. Ph.D., SET
- 3) Present Designation : Assistant Professor
- 4) Date of Birth : 12/02/1987
- 5) Contact No. : 8275206489
- 6) Email ID : aparnapawar21@gmail.com, am.pawar@tccollege.org
- 7) Date of Appointment : 14/07/2009
- 8) Teaching Experience : 16 Years
- 9) Date of joining in present college: 14/07/2009

10) Educational Qualification:

Sr. No.	Examination Passed	University/ Board	Year of Passing	Subject(s)	Class/ Grade
1	SET	Savitribai Phule Pune University, Pune	2019	Electronics	--
2	Ph.D.	Solapur University, Solapur	2015	Electronics	Awarded
3	M. Sc.	Solapur University, Solapur	2009	Electronics	Second Class
4	B.Sc.	Shivaji University, Kolhapur	2007	Electronics	Higher Second Class

11) Total Research Publications : 29

a. M.Phil. / Ph.D./Research

Sr. No.	Ph. D. Thesis Title	Name of The Univ.	Year of award	Name of Guide
1	Development of Zigbee Technology Based Wireless Sensor Network System For Greenhouse Applications	Solapur University, Solapur	June 2015	Prof. Dr. B.P. Ladgaonkar

b. Book: 05

Sr. No.	Title of Book	Year of publication	ISBN	Name & Place of Publisher
1	Electronic Waste Management Challenges and Role of Recycling	July 2024	978-93-6095-258-7 Book Chapter	Authors Press New Delhi
2	Wireless Sensor Network for Agricultural Application	2022	978-620-3-19336-7	Lambert Academic Publication
3	A Comparative Study Humidity Sensors: Plasma Polymerized and Spin Coated	2021	978-6204207445	Lambert Academic Publication

	Thin Film Sensors			
4	Electronic Instrumentation for Sensor Module.	2021	978-620-3-02985-7	Lambert Academic Publication
5	Electronic Instrumentation for AC Susceptibility Measurement	2021	978-620-3-20163-5	Lambert Academic Publication

c. Research Paper: 29

Sr. No.	Title of the Paper	Name of Journal	Month and Year of publication	ISSN	UGC. No./Impact Factor/ Citation Details
1	Development of Smart Real Time Electronic System for Warehouse Application	Journal of the Maharaja Sayajirao University of Baroda	Volume-58, No.1(VI) : 2024	0025-0422,	UGC Care Group 1 Journal
2	Design and Implementation of an Analog and Mixed-Signal System on Chip for ECG Monitoring	Journal on Future Engineering and Technology (JFET)	Volume 19 Issue 4 Sept. 2024	0973-2632	IF 4.651
3	Development of Smart Real Time Embedded System For Weather Monitoring	Journal of the Maharaja Sayajirao University of Baroda	Volume-58, No.1(VI) : 2024	0025-0422,	UGC Care Group 1 Journal
4	Development of Arduino Based Solar Tracking System to Increase Efficiency of Solar Panel	Journal of Emerging Technologies and Innovative Research (JETIR)	October 2023, Volume 10, Issue 10	2349-5162	(UGC Approved Journal no 63975) IF:7.95
5	Development of Polycrystalline Ferrite Based Smart Sensor module using Mixed Signal Programmable System on Chip	Int. Res. J. of Science & Engineering, Special Issue A12 https://doi.org/10.5281/zenodo.7839063	February, 2023, Special Issue A12	2322-0015	IF 6.70
6	Development of an Embedded System for Agro-Industrial Applications	Int. Res. J. of Science & Engineering, Special Issue A12	February, 2023	2322-0015	IF 6.70
7	Wireless Sensor Network for Site Specific Crop Management for Precision Agriculture	ICTACT Journal on Communication Technology	December 2022	(Print) 0976-0091 (Online) 2229-6948	UGC Care List
8	Review of Sun's Position Tracking System to Increase Efficiency of Solar Panel	Journal of Emerging Technologies and Innovative Research (JETIR)	April 2022,	2349-5162	(UGC Approved Journal no 63975) IF:7.95
9	Implementation of Poly Crystalline ferrite material as Sensor for CO2 Detection using Cypress CY8C29466 Based on SoC	Journal on Future Engineering & Technology	May July 2021	Print: 0973-2632 Online: 2230-7184	-

10	Implementation of Electronic Nose to Detect LPG Leakage	Journal on Embedded System	Jan-July 2021	Print: 2278-7895 Online: 2320-2335	IF:0.957 Citation-01
11	Development of Wireless Sensor Node for Automization in Restaurant Services	International Research Journal of Engineering and Technology (IRJET)	Mar 2021	Print-2395-0072 Online-2395-0056	IF7.529
12	Synthesis and Implementation of Polycrystalline Ferrite Material for Smart Sensor Module	Elsevier Editorial System Materials today Proceedings	2021,	2214-7853	IF. 3.2 Citation-05
13	Development of an Embedded System to Measure Soil Parameter	Journal on Embedded System	Dec. 2020	Print: 2278-7895 Online: 2320-2335	IF:0.957
14	Development of Smart Electronics System for Realization Smart Home	Journal on Digital Signal Processing	January-June 2020	Print: 2321-7480 Online: 2322-0368	IF:0.079
15	Carbon Dioxide Gas Sensing Property of Nickel Substituted Zinc Ferrite	Journal on Material Science(JMS)	Sept 2019	Print: 2347-2235 Online: 2347-615X	IF: 1.5 Citation-03
16	Designing of Wireless Sensor Node for Measurement of Light Intensity of Polyhouse Environment	International Journal for Research in Applied Science & Engineering Technology (IJRASET)	Dec 2018	2321-9653	UGC Approved J.No.-45842 & 47916 IF: 6.887
17	Development of an Embedded System for Measurement of Temperature Based on Polycrystalline Ferrite Material	International Journal of Electrical, Electronics & Computer Science Engineering (IJECESE)	2018	E-ISSN : 2348-2273 P-ISSN : 2454-1222	Citation-02
18	Comparative Study of Ferrite Based Humidity Sensor for Smart Sensor Module Design	Int. Res. J. of Science & Engineering (IRJSE)	Dec 2017	2322-0015	UGC Approved Journal No.63628 Citation-08
19	Synthesis and Deployment of Nanoferrites to Design Embedded System for Monitoring of Ammonia Gas	International Journal of Advances in Engineering & Technology (IJAET)	March 2017	ISSN: 2249 – 8958	IF 3.43 Citation-06
20	Investigation of Magnesium Substituted Nano Particle Zinc Ferrites for Relative Humidity Sensors	Elsevier Journal : Sensors & Actuators: A. Physical	April 2016	0924-4247	IF 4.6 Citation-63

d. Research Project:

Sr. No.	Name of Funding Agency	Project Title	Funds Received	Month and Year of sanction	Duration of the Project	Status of Project
1.	Tuljaram Chaturchand College of Arts,	AI Based Weather Monitoring System	1,35,000.00	October 2023	1 Year	Completed

	Science & Commerce, Baramati under Teacher research grant scheme	For Power Consumption Optimization				
2.	RUSA Tuljaram Chaturchand College of Arts, Science & Commerce, Baramati under student research grant scheme	Development of IoT Based Smart Waste Management System Using Arduino	15,000/-	2021-22	1 Year	Completed
3.	RUSA Tuljaram Chaturchand College of Arts, Science & Commerce, Baramati under student research grant scheme	IoT based smart embedded system for vehical accident detection	15,000/-	2020-21	1 Year	Completed
4.	RUSA Tuljaram Chaturchand College of Arts, Science & Commerce, Baramati under student research grant scheme	Development of an Embedded System for Monitoring of Environmental Air Pollution	3000/-	2018-19	1 Year	Completed
5.	RUSA Tuljaram Chaturchand College of Arts, Science & Commerce, Baramati under student research grant scheme	Mixed Signal based Programmable System-on-Chip for Monitoring of Environmental Parameters	14,000/-	2016-17	1 Year	Completed

e. Papers presented in Seminar / Conference:

Sr. No.	Name of the Conference/ Seminar	Title of the paper	Date	Level (State/ National/ International)	Name of the Organizer
1	International Conference on “Emerging Trends and Challenges in Electronics and Computing for Sustainable Development”	Smart Embedded System for Automatic Weather Monitoring	22-23 March 2024	International	Organised by Department EElectronics and Computer Science, Yashavantrao Chavan Institute of Science, Satara
2	International Conference on Recent Trends in Materials Science, Synthesis, Characterization and Applications(RTMS-2023)	Development of an Embedded System for Agro-Industrial Applications	2 nd -3 rd January 2023	International	Organized by Post Graduate Department of Physics, T. C. College, Baramati
3	International Conference on Emerging Trends and Challenges in Electronics and Computing (ETEC-2021)	Development of Efficient IoT system for Farming in Rural Area: An Approach to Precision Agriculture	4-6 March 2021	International	Organised by Department EElectronics and Computer Science, Yashavantrao Chavan Institute of Science, Satara
4	International conference on	Synthesis and	29 th -	International	Organised by

	Multifunctional and Hybrid Materials for Energy and Environment (MHMEE-2020)	Implementation of Polycrystalline Ferrite Material for Smart Sensor Module	31 st January 2020		Department of Physics and Astrophysics, Yashwantrao Chavan Institute of Science, Satara.
5	Fifth International conference on Advances in Material Science (Online)(ICAMS-2020)	Design a Smart Sensor Module for Monitoring H ₂ S Gas based on Polycrystalline Ferrite	6-7 June 2020	International	Post graduate department of Physics, Raje Ramrao Mahavidyalaya., Jath
6	International Conference on Applied Nanotechnology and Nanoscience (ICANN 2017)	Comparative Study of Ferrite Based Humidity Sensor for Smart Sensor Module Design	7 th – 9 th Dec 2017	International	Organized by Post Graduate Department of Physics, T. C. College, Baramati
7	UGC, IEEE India SSCS & CAS Chapters Sponsored National Conference on Emerging Trends in Electronics and Computer Science (ETECS-2015)	Wireless Sensor Network to Ensure Site Specific Variability	13 th - 14 th February 2015	National	Dept. of Electronics, Shivaji University, Kolhapur,
8	UGS Sponsored National Conference on Recent Advances In Embedded Technology (NCRAET-2015)	Design and implementation of Wireless Sensor Network for Electric Power Distribution	29 th – 30 th January 2015	National	Organized by Department of Electronics Ramkrishna Paramhansa Mahavidyalaya, Osmanabad
9	National Conference on Advances in Wireless Sensor Network and Its Application (NCAWSNA-2014)	Wireless Sensor Network: The Solution for Precision Agriculture	12 th and 13 th December, 2014	National	Shankarrao Mohite Mahavidyalaya, Akulj

f. Patents published : 03

Sr. No	Title of Invention	Application /Design Number	Date of Filling	Publication Date	National/ International	Status
1.	IoT Based Soil Moisture Level Indicator (Journal No. 41/2023)	394098-001	30/08/2023	12/10/2023	National	Completed Design Patent
2.	Integration of IoT and Artificial Intelligence for Enhanced Crop Production in Greenhouse Application	-	26/04/2024	24/05/2024	International	Completed Design Patent
3.	The Embedded Security Framework for the Industrial Internet of Things (IIOT) and	202211030237	26/05/2022	-	National	Ongoing (Indian Invention Patent)

12) Work Experience on Academic Bodies and other:

Sr. No.	Designation/ Position	Duration	Name of Institute / University	Details
1	Member of Board of Studies	--	T. C. College, Baramati	Electronics
2	NPTEL SPOC, Local Chapter		IIT Madras	SPOC of Tuljaram Chaturchand College Baramati
3	Editorial Board Member		i-manager's Journal on Embedded Systems (JES)	
4	Member of Board of Studies		Mauli Green Army Maharashtra Rajya Paryavaran Samiti.	
5	Member of		International Association of Engineers	(Member Number 317996)

13) Any other Attainment:

1. NPTEL Active SPOC Award NPTEL IIT Powai, Mumbai.
2. Coordinator, “Two days Workshop on Arduino ” on 10th and 11th Feb. 2022.
3. Coordinator, online one day National Webinar on “IoT: New Era of Digitization” on
4. 08th January 2022.
5. Coordinator, Two days online International Webinar on “Innovative Research Trends in
6. Green Electronics and Allied Technology” on 25 & 26 February 2021.
7. Coordinator, “Two days Workshop on Arduino Programming” on 05 Dec. 2020 to 06 Dec. 2020.
8. Research Papers Published in the International Conference, Seminars and Symposia : 11
9. Research Paper Published in National Conference and Seminar Proceeding : 40
10. Resource Person for Workshop/ Seminars/FDP : 08
11. Participation in Workshops and Training Programs : 07
12. Research Papers Presented at the State level Avishkar : 04
13. Student Research Project : 05
14. Judge for Project competition organized by Vidya Pratishthan's Arts, Science & Commerce College, Vidyanagari, Baramati on 05 March Feb 2025.