AISSMS
COLLEGE OF ENGINEERING
ज्ञानम् सकलजनहिताय
Accredited by NAAC with **"A+"** Grade
SINCE 1917
सत्याला मरण नाही

Department of Robotics and Automation Engineering

Faculty Profile

Dr.Archana Santosh Ubale

Assistant Professor
PhD Electronics & Communication
ME VLSI & Embedded System
BE Electronics
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Research Areas / Areas of Interest

Wireless Communication, WSN, VLSI and Embedded System

Academic Background

Sr. No.	Qualification	Specialization	University	Class/Grade	Year of Passing
1	PhD	Electronics and Communication	UOT, Jaipur	-	2023
2	ME	VLSI & Embedded System	SPPU	Ist class with Dist.	2015
3	BE	Electronics	SPPU	Ist class with Dist.	2005

Work Experience

S. No.	Type of Experience	Years	Months
1	Teaching	19	--
2	Industry	--	--
3	Others	--	--
	Total	19	00

Subjects / Courses Taught

S. No.	Subject	UG/PG	Class FE/SE/TE/BE/ME	No of times Subject Taught
1	Analog Communication	UG	SE E&TC	02
2	Principles of Communication System	UG	SE E&TC	02
3	Digital Communication	UG	TE E&TC	01
3	Cloud Computing	UG	BE E&TC	01
4	Mobile Computing	UG	BE E&TC	01
5	Computer Network	UG	BE E&TC	02
6	Digital Techniques	UG	SE E&TC	01
7	Renewable Energy System	UG	BE E&TC	02
8	PLC	UG	BE E&TC	02
9	Electronics in Agriculture	UG	BE E&TC	02
10	Electrical Circuits	UG	SE E&TC	02
11	Embedded System in Robotics	UG	TE R&A	02
12	Control System in Engineering	UG	SE R&A	01
13	Machine Vision System	UG	BE(R&A)	01
14	Basic Electronics	UG	FE	02

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals	00	15	00	03	02
Conferences	01	03	00	02	--

Publication Details (Journals)

S. No	Document Details	Authors	Year	Source Details	ISBN/ ISSN	Publisher
1	Resource Allocation Challenges And Strategies For RF-Energy Harvesting Networks Supporting Qos	Archana Ubale	2023	Scopus	ISSN: 2321-8169 Volume : 11 Issue: 7s	International Journal of Advanced Research in Computer Science and Software Engineering
2	Hostel Management System	Abhishek Askar, Saumya Gaur, Sejal Deolikar And Mrs. Archana Ubale	2023	Volume 3, Issue 1, August 2023	ISSN (Online) 2581-9429	International Journal on Recent and Innovation Trends in Computing and Communication
3	Design of a Novel Methodology for Dynamic Resource Allocation with Energy-Aware in Virtual Sensor Networks	Archana Ubale	2023	Scopus	ISSN: 2348-8379	SSRG International Journal of Electrical and Electronics Engineering
4	Safe, Secure and Efficient Integration of Critical Wireless Sensor Networks for Industrial Applications	Archana Ubale	2023	Scopus	ISSN: 2348-8379	SSRG International Journal of Electrical and Electronics Engineering
5	Lossless Routing Protocol Pertaining Heterogeneous Wireless Sensors Network	Archana Ubale	2023	Scopus	2528-2536	Journal of Survey in Fisheries Sciences

6	Library Assistance Using Pick--Light System	Archana Ubale	2023	Vol-13, Issue-6, No. 15, June 2023	ISSN : 2347-7180	Dogo Rangsang Research Journal
7	Battery Monitoring And Swapping Management System For Electric Vehicle	Archana Ubale	2022	Volume 9, Issue 10	(ISSN-2349-5162	Journal of Emerging Technolo-gies and Innovative Research (JETIR)
8	Baby Monitoring System	Archana Ubale	2022	Volume 2, Issue 1	ISSN-2581-9429	International Journal of Advanced Research in Science ,Communication and Technology
9	Traffic Detection Using Inductive Loop	Archana Ubale	2021	Volume 6,Issue 1,January 2021	ISSN (Online) 2456-0774	International Journal of Advanced Science Research and Engineering Trends
10	Study of wireless Powered Virtual Sensor Networks	Archana Ubale	2021	Vol-14	3337-3345	International Journal of future generation communication and networking
11	IoT Based Antenna Positioning System	Archana Ubale	2021	Volume 6, Issue 1, June 2021	ISSN (Online) 2581-9429	International Journal of Advanced Research in Science, Communication and Technology

12	Smart Shopping Mall	Archana Ubale	2021	Volume 8, Issue 6	2349-5162	Journal of Emerging Technologies and Innovative Research
13	Iot Based Smart Farming System	Archana Ubale	2021	Volume 5, Issue 12	2456-0774	IJASRET
14	Smart Water Meter	Archana Ubale	2019	UGC Approved	eISSN: 2349-5162	International Journal of Emerging Technologies and Innovative Research
15	Using Android App Home Automation and Routine Display	Archana Ubale	2019	UGC Approved	eISSN: 2349-5162	Journal of Emerging Technologies and Innovative Research
16	Automatic Waste Segregar Using Plc	Archana Ubale	2018	Volume 4, Issue 6	2395-1052	IJSART
17	Bandwidth Improvement In Hexagonal Micro Strip Patch Antenna With Suspended Structure.	Archana Ubale	2017	Volume 4, Issue 6	e-ISSSN 2348-4470	International Journal of Advance Engineering and Research Development
18	School Bus Attendance And Moniring System Using Rfid	Archana Ubale	2017	Volume 4, Issue 6	e-ISSSN 2348-4470	International Journal of Advance Engineering and Research Development

19	Comparative Study Of Bandwidth Improvement Techniques Of Micro Strip Patch Antennas	Archana Ubale	2015	Volume 5, Issue 1	e-ISSSN 2348-4470	International Journal of Advanced Research in Computer Science and Software Engineering
20	Dual Band Suspended Hexagonal Patch Antenna	Archana Ubale	2015	Volume 4, Issue 9	e-ISSSN 2348-4470	International Journal of Latest Technology in Engineering, Management & Applied Science

Publication Details (Conferences)

S. No	Document Details	Authors	Year	Conference Details	ISBN	Organized by
1.	Sustainable Network Management: A Simulation-Based Exploration of Throughput Fairness in Wireless Sensor Networks	A.S.Ubale	2023	RTESD-2023		Vivekananda Global University
2	Disturbance based wormhole avoidance in IWSN	A.S.Ubale	2023	NCIPC		Walchand College of Engineering, Sangli
3.	Fairness Assessment in Wireless Sensor Networks: A Discrimination Index	A.S.Ubale	2023	ICDIDSA-23		Sandip Institute of Technology & Research Centre, Nashik

4.	Resource Allocation Optimization in Wireless Sensor Networks Using Jain's Fairness Index	A.S.Ubale	2021	IVCIMS -21		Madurai College
5	Resource Allocation Trade-offs: Examining Max-Min Fairness and Jain's Fairness Index in WSNs	A.S.Ubale	2021	RMDSTIC-21		GRC
6	Dual Band Circular Polarized Hexagonal Micro strip Patch Antenna With Stub	A.S.Ubale	2015	ICIIECS -15		IEEE

Professional Memberships

Professional Body	Level National/ International	Type Fellow/Life/Annual	Membership No.
ISTE	National	Life	LM-67116
IETE	National	Life	M-502006
BES	National	Life	AM-2975

Details of Course/Seminar/Symposium/Workshop/FDP/FOW attended

S. N	Title	Type	Duration	Organizer	Sponsoring Agency
1	Introduction to Embedded System Design	NPTEL	Jan-Apr 2025	IIT Madras	
2	Simulations in Electronics	FDP	03/02/2025 07/02/2025	NITTTR ,Chennai	
3	Recent Trends and Techniques in Cyber Security & Digital Forensic	FDP	06/01/2025 to 10/01/2025	Dr. D. Y. Patil College of Engineering and Innovation, Varale, Dist. Pune, (Maharashtra). ISTE	

4	VLSI Design Flow: RTL to GDS	NPTEL	Jul-Oct 2024	IIT Delhi	
5	VLSI Design: IC to Silicon	FDP	1 Week	Sandip Institute of Engineering and Management Nashik	
6	Symposium on emerging trends in 6G technology	FDP	1 Week	AISSMS IOIT	
7	Applications of AI & Machine Learning in Emerging Fields using Matlab	FDP	1 Week	Prof Ram Meghe College of Engineering and Management, Badnera, Maharashtra.	
8	Ethical Issues in Research Writing	FDP	1 Week	Regional College for Education Research and Technology, Jaipur	
9	PLC and SCADA	FDP	1 Week	NITTTR	
10	Artificial Intelligence: An Engineering Milestone	FDTP	1 Week	AISSMS Polytechnic	MSBTE Sponsored
11	Fundamentals of Chip Designing	FDP	1 Week	Dr. D. Y. Patil Institute of Technology	
12	Artificial Intelligence and Generative Model	FDP	1 Week	Vishwakarma Institute of Technology, Pune	
13	Data Analytics using power 'BI'	FDP	1 Week	AISSMS IOIT,Pune	
14	Educational Leadership	FDP	12 Weeks	NPTEL	
15	Teaching & Learning Advancements in Science & Engineering	FDP	1 Week	Regional College for Education Research & Technology, Jaipur	
16	Recent Trends in Mobile Computing with Real Time Approach	FDP	1 Week	BSIOTR,Wagholi	
17	Mobile Computing (FOW)	FOW	3 Days	BOS	
18	AWS Academy Cloud foundation and AWS Academy Solution Architect train the trainer Certification	Course	2 Weeks	Eduskill Foundation	

19	RF test & measurement solution using vector network analyzer and spectrum analyzer	Workshop	1Day	AISSMSIOIT	
20	Stepping towards problem and project based learning	Workshop	2 Days	AISSMSIOIT	
21	Emerging trends in 5G enabled Education	FDP	3 Days	AISSMSIOIT	
22	Adobe Academic Essentials	Workshop	1 Day	AICTE	AICTE
23	Web Services & Google Cloud Platform	FDP	1Week	KJ College of Engineering and Management Research	
24	Amazon Web Services	FDP	1Week	Brainovision Solutions India Pvt. Ltd &AICTE	
25	Cloud Computing	FDP	12 Weeks	NPTEL	
26	"Project Based Learning"	STTP	1 Week	ISTE	
27	Cloud Computing	FOW	3 Days	BOS	
28	Cloud Computing using AWS and Google cloud platform	FDP	1 Week	ISTE	
29	Cloud Computing Lab Sessions	FDP	1 Week	PICT,Pune	
30	Innovative Research & Development Trends in Electronics & Communication Engineering	FDP	1 Week	G.L. Bajaj Institute of Technology & Management, Greater Noida.	
31	Modulation, Coding and Multiple Access Techniques for Wireless Communication and Storage Systems	FDP	1 Week	AICTE	
32	Multi Technologies	FDP	1 Week	Braino Vision	
33	Computer Network	FOW	2 Days	BOS SPPU	

34	Interactive Teaching Learning Strategies With Affective & Cognitive Approach (ITLS)"	FDP	1 Week	PVG's COET & GKPIM ,Pune	
35	Al-ML Principles and Techniques	FDP	1 Week	RMD Sinhgad School of Engineering	
36	"Python 3.4.3"	FDP	1Week	Sinhgad College of Engineering, Vadgaon	
37	"Energy and environmental science technology and management for sustainable development "	FDP	1Week	D.Y.Patil Pimpri	
38	"Sensors Technology"	FDP	1Week	ATAL	AICTE
39	FOW on revised syllabus of PCS	FOW	3 Days	D.Y.Patil Pimpri	
40	Introduction network security	FDP	1Week	NITTTR, Kolkatta	
41	Automated Manufacturing System	FDP	1Week	NITTTR, Kolkatta	

Details of Course/Seminar/Symposium/Workshop Organized

S. No	Title	Type	Duration	Level (State/National/ International)	Sponsoring Agency
1	Artificial Intelligence: An Engineering Milestone	FDTP	29/01/2024 to 02/02/2024	State level	(MSBTE Sponsored)
2	IoT and Its Applications	FDP	04/01/2024 to 05/01/2024	State level	
3	AI in Engineering	FDP	30/10/2023 to 31/10/2023	State level	-
4	Coffee and Conversation With Alumni	Event	06/03/2023	College	-
5	Emerging Trends in 5G Technology-Enabled Education	FDP	2/5/2023 to 4/5/2023	State level	PMA ,pune
6	Antennas for Modern Wireless Communication	Workshop	01/02/2018 to 02/02/2018	National	SPPU,Pune

Responsibility Handled

S. No.	Role and Responsibilities
1	Worked at ESCI-2024, ESCI-2025 conference as a Reviewer.
2	Worked as a Paper Setter for MSBTE Exam(2023-24)
3	Worked as ESCI-2023 Special session coordinator.
4	Worked at ESCI-2023 conference as a Reviewer.
5	Worked as a Assessor in IAA IN SEM –II of 2022-2023
6	Worked as a Paper Setter for SPPU Exam (2022-2023)
7	Worked as a Assessor in IAA IN SEM –I of 2021-2022
8	Worked as ESCI-2021 session coordinator.
9	Worked as a Paper Setter for SPPU Exam (2021-2022)
10	Worked as a Alumni coordinator at Department level
11	Worked as a Lab In charge
12	Worked as a Eduskill Departmental Coordinator

Awards and Recognition

Sr.No.	Awards/Recognition
1	Paper entitled "Intra-Class Fairness Assessment in Wireless Sensor Networks: A Discrimination Index Perspective" in 1st International Conference on Deep Learning, IoT, Drone Technology, Smart Cities & Application (ICDIDSA-23) has received an award of best innovative idea based paper of the technical Session.
2	Top Topper in 1% in NPTEL Exam2023 with 100 score.
3	Recognition in CTMS for voluntary Contribution in AY-2022-2023

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

Dr Archana S.Ubale