


<b>Name:</b>	<b>S.USHA</b> 			
<b>Designation:</b>	Associate Professor			
<b>Qualification:</b>	M.E. (Ph.D.)			
<b>Area of specialization:</b>	EMBEDDED SYSTEM TECHNOLOGIES			
<b>Experience : (As On Dec. 2022)</b>	<b>Industrial Experience</b>		<b>Teaching Experience</b>	
	4 YEARS		21.6 YEARS	
<b>Number of workshop / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	13		24	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	12	4	4	9
<b>Professional Body Membership:</b>	Member of <b>IEEE, IETE , ISTE , IEI and IAENG</b>			
<b>Staff Achievements:</b>	<p>Achieved 100% result many times  Ranked one among top 2% in NPTEL <b>Digital Circuits</b>,  5 % in NPTEL <b>Embedded system design and CMOS digital VLSI</b> courses  Completed more than 20 courses in <b>Coursera</b>, 5 courses in <b>Futureskills, Guvi, ICT Academy</b>  Co-ordinated FDP's, Workshops, Conferences, Symposium etc.  Acted as a Reviewer, Resource person and Session Chair  Onboard member of two private companies  Department NBA and NAAC coordinator</p>			

	<p>Course Coordinator, Course Moderator, Embedded SIG Head.  Received National Educator Award from I2OR  <b>Completed NITTTR MENTORSHIP CERTIFICATION – July 2021</b>  <b>Completed all 8 modules in NITTTR.</b>  <b>Received NITTT Achiever Award</b></p>
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<b>Workshop Details:</b>	<b>Sl. No.</b>	<b>Title</b>	<b>Venue</b>	<b>Month/Year</b>
	1	Industry Institute Interaction	Anna University	5 <sup>th</sup> Sep'2006
	2	Matlab and its applications- Raguram Associates	Sri Sai Ram Engg. College	26 <sup>th</sup> July2007 to 27 <sup>th</sup> July2007
	3	Emerging trends on high-end FPGA's	Anna University	10 <sup>th</sup> Dec'2010 to 12 <sup>th</sup> Dec'2010
	4	Seminar on VLSI Design	Hotel Rain tree, Anna Salai, Chennai -2.	7 <sup>th</sup> Sep'2012
	5	Recent trends in Antennas for Multifield Applications	Sri Sai Ram Engg. College	27 <sup>th</sup> Dec'2012 & 28 <sup>th</sup> Dec'2012
	6	Entrepreneurship Summit 2013	Sri Sai Ram Institute of Management Studies	8.1.13 – 10.1.13
	7	R&D Proposal writing for Faculties	Sri Sai Ram Engg. College	12.06.20
	8	Workshop on National Initiative for Technical Teachers Training (NITTT)	NITTT	20.02.20
	9	Advancements in Embedded System and Software Design"	SSN College of Engg.	31.7.20 & 1.8.20
10	Webinar on CAD tools for VLSI Design	Kamaraj College of Engineering and Technology	13.06.20	

	11	Webinar on Article Writing and Journal Publications	Kings Engineering College	17.07.20
	12	Workshop on PCB Design	Kings Engineering College	19.06.20
	13	Hands on workshop on Routing and Switching concepts in Data communication and Networking using Cisco Packet Tracer	Sri Sairam Enginnering College	1.12.22 to 2.12.22

<b>FDP Details:</b>	<b>Sl. No.</b>	<b>Title</b>	<b>Venue</b>	<b>Month/Year</b>
	1	FDP on Digital Communication	SSN College of Engg.	24th Nov'2003 to 29 <sup>th</sup> Nov'2003
	2	FDP on Mechatronics	Crescent Engg. College	24th May-2004 to 29 <sup>th</sup> May- 2004
	3	Work life balance for Engineering and Management Faculty	Sri Sai Ram Engg. College	16th Feb'12 to 22 <sup>nd</sup> Feb'12
	4	Role of Academic Excellence in Developing World Class Higher Learning Institutions and Faculties	Sri Sai Ram Engg. College	12 <sup>th</sup> Dec'12
	5	FDP on Embedded Systems with ARM 7 Microcontroller	Sri Sai Ram Engg. College	25th June'15 & 26th June'15
	6	FDP on Embedded and Real time systems	Sri Sai Ram Engg. College	06th June'16 to 13th June'16
	7	FDP on Outcome Based Pedagogy	IIT, Chennai	13th Nov'18 to 15th Nov'18

8	FDP on Outcome based Pedagogic principles for effective teaching	IIT, Kanpur	Aug – Sep'18
9	FDP on Entrepreneurship career development program	SIMS	08/04/19 TO 12/04/19
10	FDP on Outcome based Education	Sri Sai Ram Engg. College	5th Apr'19
11	FDP on CMOS Digital VLSI Design	IIT, Karagpur	Feb-Apr'19
12	Organized FDP on CMOS Analog IC Design	Sponsored by Anna University	25.11.19 to 30.11.19
13	Online spoken FDP on Advanced Communication Laboratory	PSNA College of Engg. & Technology, Dindugal	20.07.20 to 25.07.20
14	FDP on Virtual Labs	IIT PALS	24.8.20 to 28.8.20
15	“FPGA for Low Power IoT”	SRM VALLIAMMAI ENGINEERING COLLEGE	06.12.2021 to 11.12.2021.
16	FDP on "Design Thinking"	University College of Engineering(A), JNTUK.	2020-10-12 to 2020-10-16
17	FDP on "Artificial Intelligence"	Sri Sairam Engineering College.	2020-12-7 to 2020-12-11
18	FDP on "Artificial Intelligence"	at Indian Institute of Technology Patna.	2020-10-19 to 2020-10-23
19	Online FDP on "Internet of Things (IoT)"	Sri Sairam Engineering College.	2020-11-30 to 2020-12-4
20	FDP on "Computer System Design"	at IIT Tirupati.	03/01/2022 to 07/01/2022
21	FDP on "Research Issues in VLSI Design and Testing"	Government College of Engineering Srirangam.	2021-08-02 to 2021-08-06

	22	SciLab Programming	Information Management and Emerging Engineering Department	25/04/2022 to 29/04/2022
	23	5-day Face-to-Face UHV-II FDP	at Sri Sairam Engineering College Autonomous, Chennai	26th July to 30th July 2022
	24	FDP on SOC Design Methodologies using INTEL FPGA	St. Joseph's college of Engineering	20.07.22 to 22.07.22
<b>Conference Details:</b>	<b>Sl. No.</b>	<b>Title</b>	<b>Venue</b>	<b>Month/Year</b>
	1	National Conference on Emerging Trends in Communication “ Performance Comparison of Packet scheduling algorithms in Mobile Adhoc Networks	Dhanalakshmi Srinivasan Engineering College	28th Feb 2007
	2	AICTE Sponsored International Conference on Innovative computing, Information and Communication Technology (ICICT'09)	Sri Sairam Engineering College	16 to 18 Dec 2009
	3	National Conference on Advances in Electrical and Electronics Engineering-2013 Adaptive runtime reconfigurable wireless sensor	Sri Venkateshwara college of Engg.	15.3.13 Page 6

		nodes based on dynamic data aggregation		
	4	National Conference on Advanced Communication & Computing Techniques NCACCT'13 “ Reconfigurable wireless sensor Networks	Sri Sairam Engineering College	18-19 th March 2013
	5	First National Conference on Recent Trend in Information Technology NCRIT 2012 “ A cost Effective Automatic Antifreeze fluid sprinkler for Railway Coal Conveyors “ G. Sudhakar, Ms. S.Usha, Page No. 155-158	RMK College of Engg and Tech.	20th Feb 2012
	6	Research Trends in Electronics and Communication, “ Implementation of speed control of Brushless DC motors using IOPT Petri Net models	St.Joseph's College of Engineering	21 <sup>st</sup> Mar'2014
	7	5 th National Conference on VLSI, Embedded, Communication and Networks(VECaN-2014) Speed Control of Motors using IOPT tools	Easwari Engineering College	17.4.14

	8	Advanced Communication & Computing Techniques	Sri Sairam Engineering College	18th Mar'2013 & 19 <sup>th</sup> Mar'2013
	9	Emerging Research & Advances in Mechanical Sciences” Vehicle Collision Avoidance with adaptive cruise control	Velammal Engineering College	22 <sup>nd</sup> Mar'2013
	10	Future Proof your code with the latest co-processor	Taj Connemara, Binny Road, Chennai -2.	18 <sup>th</sup> Sep' 2013
	11	National Instruments symposium 2014	Hotel Radisson Blu, Chennai	9 <sup>th</sup> Sep' 2014
	12	Advanced Communication & Computing Techniques	Sri Sairam Engineering College	11 <sup>th</sup> April 2014
	13	Construction, Computing, Control, Communication and Manufacturing, “ Alert System for forest animals to avoid from Train Accidents, R.	SRS College of Engineering and Technology	23rd Feb'2015 to 28th Feb'2015
	14	5 th International Conference on Science and Innovative Engineering 2015 Alert system for Forest Animals to avoid from train accidents,	Jawahar Engineering College	5.4.15 ISBN 978-81-904760-7-2
	15	First International Conference on Recent Trends in Enigneering and	St.Joseph’s Instituuete of Technology	28-29 th April 2016

		Technology (ICRTET-16) Paper titled Prediction of Insulation Failure in Transformer winding using Signature analysis”		
	16	International Conference on Communication, Computing & Internet of Things (IC3IOT 18)	Sri Sairam Engineering College	15-17th Feb 2018

<b>Journal Details:</b>	<b>Sl. No.</b>	<b>Title</b>	<b>Journal Name</b>	<b>Volume/Date</b>
	1	Cloud Based Reconfigurable DC Motor Controller Code Design Using IOPT models	International Journal of Research in Engg. And Advanced Technology	Volume 1, Issue 5, Oct - Nov 2013 ISSN: 2320-8791
	2	Real time System for Monitoring and Improving the flow of sewer system, M.K. Elango and S.Usha	International Journal of Emerging Technology & Advanced Engineering	Volume 4, Issue 2, February 2014 ISSN:2250-2459
	3	Alert System for forest animals to avoid from train accidents R.Vinoth and S.Usha	International Journal of science and innovative engineering and technology	Volume 2 May2015 issue ISBN 978-81-904760-7-2
	4	“Prediction of insulation failure in transformer winding using signature analysis.”	SS International Journal of Multidisciplinary Research [SSIJMR].	Volume 2 Issue 6, 2016 E-ISSN: 2395-7964 Page No. 68
	5	Optimized BPSK and QAM Techniques for OFDM systems	IJCTA, International Science Press	2016 ISSN: 0974-5572; pp:2759-2766



	6	Mechanism of 3 DOF robotic needle steering model using Labview	International Journal of Recent Engineering Research and Development	Vol. 02, Issue 06, June 2017 ISSN: 2455-8761   PP. 01-08
	7	IOT Based Anti-Theft Protection And Continuous Monitoring System For ATM	THINK INDIA Journal	April -June 2019 ISSN:0971-1260
	8	Waiter robot with billing system	THINK INDIA journal	April -June 2019 ISSN:0971-1260
	9	Process Automation in RTO offices for issuing Driving Licences	Studies in Indian Place Names (UGC Care Journal)	ISSN: 2394-3114 Vol 40 issue 1 (s1) January 2020 Page No. 54-59
	10	DOMOTICS BASED ON SEARCH ASSISTANT	Studies in Indian Place Names (UGC Care Journal)	ISSN: 2394-3114 Vol 40 issue 1 (s1) January 2020 Page No. 29-38
	11	Search Assistant Based Home Automation	INTERNATIONAL JOURNAL OF ELECTRONICS, COMMUNICATION & INSTRUMENTATION ENGINEERING RESEARCH AND DEVELOPMENT (IJEIERD); "	ISSN (ONLINE): 2249-7951; ISSN (PRINT): 2249-684X; IMPACT FACTOR(JCC) (2020): 8.2083; INDEX COPERNICUS VALUE (ICV) - (2016): 61.75; NAAS RATING: 2.92; VOL - 10, ISSUE - 2; EDITION: DEC2020 Page No. 21-28

	12	A novel algorithm with complexity reduction for Multimedia Applications using 8 point DCT	International conference on Communication, computing and Internet of Things	DOI:10.1109/IC3IOT539 35.2022.9767964
	13	Energy efficient Spatial Modulation in Wireless Sensor Networks	International conference on Communication, computing and Internet of Things	DOI:10.1109/IC3IOT539 35.2022.9768000

**BOOK CHAPTER:**

**Societal and Ethical Implications of Robotics** “ ESN Publications.DOI/ISBN

Number: 978-93-90781-09-6 Volume/Issue:1/1, Year published: February 2021

**Patent Details:**

1. A METHOD AND DEVICE FOR THE DEFORMATION OF THE WASTE CONTAINERS THROUGH THE PNEUMATIC OPERATED

Application No.202041052263 A Publication Date :

11/12/2020

2. Security Tracking Big Data Processing System with Cloud Computing

Application No.202241010451 A Publication Date : 18/03/2022

I hereby declare that the information provided above is true and correct.

S.USHA