



Sri SAI RAM INSTITUTE OF TECHNOLOGY


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Name : DR.N.Parvatham	Photo: 
Designation	Assistant Professor
Qualification	M.E, Ph.D
Area of Specialization	VLSI Design,Image processing
Experience	UG : 18yrs PG: 16 yrs Industrial Experience : NIL
No of papers Published in Journals	8
No. of workshop / Conferences / FDP attended	Workshops & FDP : 20 International Conference :11 National Conference : 2
No. of workshop / Conferences / FDP organized	Workshops: 3 Webinar: NIL FDP:NIL International Conferences: 1 National Conferences : NIL
No.of Funded Projects, Patents	NIL, 3 Patent
No.of Research Guidance	4 students
Membership in Professional Bodies	IRED,IAENG
Any other Achievements	

PROFESSIONAL EXPERIENCE:

S.No	Organization	Post Held	Number of Years	From	To
1.	Sri Sairam Institute of Technology, Chennai	Associate Professor	1 month	07-06-2022	Till date
2.	PRIST Deemed University, Thanjavur	Associate Professor	4 years 3 months	02-05-2017	30-08-2021
3.	Mookambigai College of Engg., Pudukkottai	Assistant Professor	12 years 10 months	09-06-2004	30-04-2017
4.	M.I.E.T.Engineering College, Trichy	Lecturer	6 months	22-12-2003	08-06-2004

FACULTY ACHIEVEMENTS:

Publications	Journals
	<ol style="list-style-type: none">1. Parvatham, G.Seetharaman, “Field Programmable Gate Arrays Implementation of Multiplier Free Architecture for Image Compression”, Advanced science letters, Vol.20, pp 2050-2054, 2014. Scopus indexed2. N.Parvatham, G.Seetharaman, “Application Specific Integrated Circuit Implementation of Multiplier Free Modified Flipping Architecture for Image Compression” , Advanced science letters, Vol.20,pp 2055-2059, 2014. Scopus indexed3. N.Parvatham, .R.Prabakaran, “New Design for FIR

		<p>Filter with Optimization of Speed and Power Using ASIC”, Asian Journal of Information technology, Vol.15, no.6, 2016. Scopus indexed</p> <p>4. Vijayasaro.V Nithyanandam.S, N.Parvatham, “An IOT Based Real Time Implementation Solution for Energy Crisis Using Bluetooth”, International Journal of Pure and Applied Mathematics, Volume 117, No. 20, 2017, PP.1-8. Scopus indexed</p> <p>5. Vijayasaro.V Nithyanandam.S, N.Parvatham , “A novel development of wireless mesh protocol data transmission framework for internet based energy conservation”, Acta Technica, No.63, pp.1- 8, 2018. Scopus indexed</p> <p>5. Bharathi R, N. Parvatham, “Hardware-Based Physical Layer Security Solutions and Algorithms for IoT Devices on FPGA Platform”, International Journal of Innovative Technology and Exploring Engineering (IJITEE), pp. 2128-2132, Volume-9 Issue-3, January 2020. Scopus indexed</p> <p>7. Bharathi R, N. Parvatham, “LEA-SIoT: Hardware Architecture of Lightweight Encryption Algorithm for Secure IoT on FPGA Platform”, International Journal of Advanced Computer Science and Applications (IJACSA), Volume-11 No. 1, January 2020. Scopus indexed</p> <p>8. Bharathi R, N. Parvatham "Light-weight PRESENT block Cipher Model for IoT Security on FPGA" ,Intelligent Automation & Soft Computing , Volume 33, No.1, July 2021. Sci indexed.</p>
	Books / Book Chapters / Monographs	-
	Online Courses	Nptel Completed system design through verilog from Nptel

		in 2022 in Elite.
	Conferences	<p style="text-align: center;">International Conference</p> <p>1.Parvatham.N, G.Seetharaman, “A Novel Architecture for an Efficient Implementation of Image Compression Using 2D-DWT”, Proceedings of Intelligent Systems Modelling and Simulation,(ISMS) 2012, pp. 374-378. DOI: 10.1109/ISMS.2012.97 .Malaysia.</p> <p>2. Parvatham.N, G.Seetharaman, “A novel approach for and efficient implementation of 2 Level 2D DWT using ASIC and FPGA, Proceedings of International conference on Emerging trends and applications in computer science, 2013, pp.242-247.DOI: 10.1109/ICETACS.2013.6691430, Megalaya.</p> <p>3.Parvatham.N, G.Seetharaman, “Implementation of One Level 2D DWT Using MultiplierLess Modified Flipping Architecture”, Proceedings of Asia modelling symposium (AMS), 2013, pp. 137-142.DOI: 10.1109/AMS.2013.27. Hongkong, China.</p> <p>4. Parvatham vijay, Dr.R.Prabakaran, Gowdham “Design of Finite Impulse Response Filter for 1-D Discrete Wavelet Transform using Parallel and Pipelining Approach”, Proceedings of FEAST 2018,NIT,Trichy,pp.291-99.</p> <p>5.Parvatham vijay, Bharathi, “SEM Medical Image processing using VLSI”, Proceedings of ICCIP-2019, Pune, Maharastra, pp.1-11.</p> <p>6. K.Angel Kalaiselvi, N.Parvatham,”VLSI Implementation of knowledge based compressed neural network with hashing trick method”, Proceedings of 2nd International Conf. on emerging enhancement in Engineering and Technology” held at Indra Ganesan College of Engineering,Trichy, March 2016.</p> <p>7. R.Allwinraj, N.Parvatham,”A CMOS design for</p>

low power three input XOR/XNOR with systematic cell design methodology”, Proceedings of 2nd International Conf. on emerging enhancement in Engineering and Technology” held at Indra Ganesan College of Engineering, Trichy, March 2016.

8. D.Ranjani, **N.Parvatham**, “Low power test pattern generator for scan based on BIST”, Proceedings of Research advances in Communication, Computation,Electrical Science and Structures, held at Bharathiyar Institue of Engineering for women, Salem, Feb-2014.

9. S.Kundavai priya. **N.Parvatham**, “ Scale-free hyperbolic CARDIC processor application to waveform generation”, Proceedings of International conference on Engineering and Applid sciences held at S.R.I.College of Engineering and Technology, Vandavasi, Mar-2014.

10. S.Prasanna, **N.Parvatham**, “Efficient implementation of approximate adder and multiplexer using quntum dot cellular automata”,Proceedings of International conference on emerging trends in Engineering and technology held at Padyan saraswathy yadav Engineering college,sivagangai, Mar-2014.

11. J.R.Ranjitha, **N.Parvatham** , “Performance analysis of shift registers low power techniques using in CMOS &CNTFET Technologies”, Proceedings of International conference on emerging trends in Engineering and technology held at Padyan saraswathy yadav Engineering college, sivagangai, Mar-2014.

National Conferences:

1. **N.Parvatham**, J.Hemalatha, “Fault tolerant evolvable software using FPTAs”, Proceedings of National conference on emerging technologies, held at M.Kumarasamy college of Engineering,karur, Nov-2007.

		<p>2. Parvatham. N, “Automated fuel dispenser using VLSI Technology”, Proceedings of 2nd national conference on emerging trends in communication and information technology, KSR College of technology,tiruchengode, Jan-2006.</p>
Events organized		<ol style="list-style-type: none"> 1. Networks lab workshop 2. Aurdino workshop 3. Scilab workshop 4. International Conference(Reg.Committee)
Events attended		<p>Investigation on design challenges and applications of cyber physical systems</p> <p>Incorporating Universal Human Values in Education</p> <p>Future of AI</p> <p>Brain controlled Robot design</p> <p>Arduino workshop</p> <p>Scilab workshop</p> <p>Ubiquitous Robot</p> <p><u>Two-Week ISTE STTP on CMOS, Mixed Signal and Radio Frequency VLSI Design</u></p> <p>Hands on Experience on Tanner EDA and Mentor Graphics.</p> <p>Workshop on Wavelet and sparse signal representation- Research focus</p> <p>Seminar on Wavelet transforms and its applications</p> <p>Advanced refresher program for VLSI faculty with hands on training on analog-mixed signal and digital design using CADENCE tools.</p> <p>Workshop on VLSI Applications in higher data rate communications and signal processing using ASIC tools.</p> <p>Seminar on software defined radio.</p> <p>Research methodologies</p> <p>FDP on VLSI DESIGN.</p> <p>Seminar on emerging trends in RFID technology</p> <p>SDP on design,testing and formal verification techniques for integrated circuits and systems</p> <p>Seminar on emerging trends in communication Engineering</p> <p>Workshop on Bio-signal data acquisition and processing</p> <p>Workshop on digital laboratory.</p>
Awards Received		Two cash awards for produced 100%results
Details on Funded Projects		-
Details on Thesis		A new approach for an efficient implementation of

	image compression using DWT
Details on Research Guidance	4 STUDENTS
Details of Patents	<ol style="list-style-type: none"> 1. Development of High Performance harmless cooling system of refrigeration plant using terracotta (29.06.2018), Issue No: 26/2018 Page No: 24123-Application no. 201841022934 A 2. Design and fabrication of low cost breath monitoring system using Arduino UNO in IOT platform-12-03-2021-Application number-202141008418 <p><u>Design patent</u></p> <p>Desktop Mini Surface Grinder-Design Application number-306904</p>