Name : **Dr. G.Shanthi**Designation : Assistant Professor

Department : Electronics and Communication Engineering

Mail ID : shanthi_g@vnrvjiet.in

Experience (in years): Teaching: 10 Research: Others (If any, Specify): 09 year

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of	Specialization
		passing	
1	Ph.D	2022	RF MEMS, RF MEMS
			Filters
2	M.Tech	2012	VLSI System Design
3	B.Tech	2009	ECE
4	PDIT	1996	Instrumentation
5	DECE	1993	ECE
6	SSC	1988	

2. Teaching and Learning:

- 2.3 Teaching Interests: VLSI Design, Pulse and Digital Circuits, Digital IC Applications, Switching Theory and Logic Design, Linear Integrated Circuit Applications, Electronic devices & Circuits, Basic Electronics, CPLD & FPGA, HDL Programming, Micro Processor and Interfacing, Basics of Nano Science and Technology, Digital System Design, Digital Logic Design.
- 2.2 Novel Teaching & Learning Techniques adopted: POGIL, Activity based learning, WIT and WIL, PPT, Lab Protocal, story board.
- 2.3. Involvement in curriculum updating / Design: Involved in Lab Protocal Design, Story Board Design of LDIC Lab, Curriculum Updation of STLD, VLSI Design.

3. Co-curricular and Extra-Curricular Activitie

- 3.1. Interests and Hobbies:-Reading books, Painting, Watching TV.
- 3.2. CCA/ECA Organized: NA
- 3.3. CCA/ECA participated: NA
- 3.4. Counseling and Mentoring Activity: 20 UG Students in ECE stream
- 3.5. Committees involved in:

Department level: Compter Networks Lab In charge

Institute Level: Member Stage Decoration Committee in Annual Day, Cultural day Programs.

4. Conference / Workshop / Seminar / Guest Lectures:

4.1 Conducted:

• Organized Certification course on "ASIC Design flow using Industry standard EDA tools"

4.2 Attended:

- Short Term Course on "Embedded Systems "during March 2006 at VNRVJIET, Hyderabad.
- Three day workshop on Virtual Instrumentation during Nov 2008 at VNRVJIET, Hyderabad.
- Three day workshop on Embedded Processors and Systems during June 2010 at VNRVJIET, Hyderabad.
- Two day workshop on Introduction to Virtual Instrumentation during June 2011, at VNRVJIET, Hyderabad.
- Staff Development Program on DSP Processor Architectures & Programming during Dec 2011, At VNRVJIET, Hyderabad.



- Two day workshop on Biomedical Signal ProcessingUsing LABVIEW during Aug2012 using LABVIEW
- AICTE Sponsored FDP on "VLSI DESIGN" during 20-05-2013 to 01-06-2013.
- Workshop on "Research Methodologies" at BITS Pilani Hyderabad Campus from 3-04-2015 to 4-04-2015.
- TEQIP-II Sponsored Work shop on "Real time Applications using LABVIEW" at VNRVJIET during 1st 4th July 2015
- •Participated in 2-Weeks ISTE STTP on "Technical Communication" Conducted by IIT-Bombay, Online activity and Face to face participation at Remote center of VNRTVJIET during 8-10-2015 to 5-12-2015.
- FDP program on "VLSI System Design" on 28-11-2015, Marri Laxman Reddy Institute of Technology amd Management ,Hyderabad
- Workshop on "Analog Discovery Kit" at BVRIT, Hyderabad Campus from 26-02-2016 to 27-02-2016.
- Attended 2 week ISTE STTP on "CMOS Mixed Signal and RF VLSI Design Workshop" Conducted by IIT-Khargpur, Online activity and Face to face interaction at Remote center of VNRTVJIET during 30-1-2017 to 4-2-2017.
- Attended SERB and ISRO Sponsored One Day Workshop on "Advances in RF MEMS Devices for Space Applications" during 24th, February, 2018 at KL University, Green Fields, Vaddeswaram, Vijayawada, Andhra Pradesh
- Participated in the two day workshop on "Technical Writing"held on 28th and 29th June 2019 at VNRVJIET conducted by Dept. of Hand S.
- Participated in the one week FDP on "Robotics and AI" jointly oraganized by E&ICT academies during 24th-28th June, 2019 by the Ministry of electronics and information Technology (MEITY) govt. of India. This programme is endorsed by AICTE/UGC/NBA.
 - Participated in the one week FDP on "VLSI chip Design Hands –On using open source EDA" jointly oraganized by E&ICT academies during 08th -12th July, 2019 by the Ministry of electronics and information Technology (MEITY) govt. of India.
 - Participated in the two day workshop on "Pedagogical Perspective of SWAYM-MOOCS" held on 15th and 16th May 2019 at JNTUH, Kukatpally, Hyderabad.
 - Participated in the one week FDP on "Sensor Networks and IOT" jointly oraganized by E&ICT academies NIT Warngal &VNRVJIET, Hyderabad during 26th -31th Aug. 2019 by the Ministry of electronics and information Technology (MEITY) govt. of India.
 - Attended for the three day work shop in "Basic Trainig Program in Nano Science and Technoogy, Supported by MHRD, Govt of India conducted at the center for Nano Science and Engg. Indian Institute of Science, Bangalore, from 14th-16th October-2019.
 - Workshop on SERB Sponsored National Workshop on "Recent Trends in RF MEMS Devices for IOT Applications", KL University, Green Fields, Vaddeswaram, Vijayawada, Andhra Pradesh.27th,December, 2019.
 - Workshop on "Python programming with Industry Perspective", conducted by Electronics and ICT Academy, NIT Patna, and Dept. of ECE&EIE in Association with IEEE&ISTE, VNRVJIET, Hyderabad during 2nd-6th Dec, 2019.
 - Attended for Wireless and Mobile Communication work shop conducted by E& ICT Acdemy NIT Warangal, at VNRVJIET, Hyderabad during 1st-6th July, 2019.
 - Attended for "Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop" conducted by during 16th May,2020 1 Week (online activity+face to face inteaction).

- Attended Online Faculty Development Program on Modern Research Trends in Communication, Signal Processing and VLSI/MEMS conducted by Department of ECE, Andhra Loyola Institute of Engineering & Technology, Vijayawada during 19th 23rd May, 2020.
- Attended 3 day FDP on "VLSI IC design flow". conducted by Department of ECE, Anurag University, Entuple Technologies during 28th-30th May,2020
- Attended 3-day National online Faculty Development Programme on "ResearchTopics in VLSI and Industry Trends" conducted by Department of ECE, GMR Institute of Technology,GMR Nagar, Rajam-532127 during 29th-31st May,2020.
- Attended 3-day International online Faculty Development Programme on "AI and IoT for medical applications" conducted by Department of ECE, GMR Institute of Technology, GMR Nagar, Rajam-532127 during 01st-3rd June, 2020.
- Attended Two-Day Online FDP on "Effective Technical Report Writing Using LaTeX", conducted by Dept. of ECE, MGIT in association with Swecha during 8th 9th June 2020
- Attended Faculty Development Program on "Artificial Intelligence in Healthcare" conducted by Dept. of E&TC Engg. R. C. Patel Institute of Technology, Shirpur, Dist-Dhule(MS) 425405 during 10th, 11th June, 2020.
- Attended "The BodhiTree and SAFE Tools for Effective Online Teaching: A Hands On Workshop ". conducted by IIT, Bombay during 20th June,2020, 1 Week (online activity+face to face inteaction)
- Attended one week FDP on "Embracing the Creative side of Teacing and Learning Methods" conducted by R.M.K. College of Engineering and Technology, Puduvoyal, Thiruvallur Dt, TamilNadu during 29th June-3rd July, 2020 (On-line mode)
- Attended 2 weeks FDP on "Embedded UVM Open Source Emulation & Functional Verification" conducted by E & ICT Academy, NIT, Patna and Dept. of ECE, VNRVJIET, Hyderabad (Sponsored by MeitY HRD division, Ministry of ICT, Govt. of India) during 13th 24th July, 2020
- Attended one week PDP on "NBA in a NUTSHELL" IEEE Student Branch and dept. of ECE, VNRVJIET, 13th 24th July, 2020
- Attended one week FDP on on "Future Nano Electronic Devices & Circuits" conducted by Dept.of ECE, MGIT, Hyderabad, Telangana during 6th 11th, July,2020
- Attended one week FDP on "Next Generation Semiconductor Devices Modelling and Simulation" conducted by Dept. of ECE, KL Deemed to be university, Vijayawada in Association with IETE Vijayawada during 4th-8th August 2020.
- Five-Days Online Workshop on "Recent Trends in Innovative CMOS-MEMS Technologies and Applications: Hands on Learning" organized by Department of Electronics and Communication Engineering, National Institute of Technology Silchar, India from 11th -15th September, 2020(Online Mode).
- Attended 6 days International online FDP on "MEMS Based Sensors and Actuators for Biomedical Applications" conducted by Micro Electronics Research Group, Department of ECE, KLEF in association with IETE, Vijayawada Chapter during 2nd 7th Nov, 2020.
- Five Days online National Workshop on "Recent Trends in Microelectronics Devices, VLSI Circuits and Their Applications" organized by Microelectronics Research Group, Dept. of ECE, KL Deemed to be university, Andhra Pradesh, India on from 25th -29th January, 2021(Online Mode).
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Stress Management" from 13/09/2021 to 17/09/2021 at VNR Vignana Jyothi Institute of Engineering and Technology.

• Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Artficial Intelligence(AI) in VLSI Chip DESIGN" from 06/12/2021 to 10/12/2021 at Koneru Lakshmaiah Education Foundation

5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures: Worked as Resource person for one Session FDP on VLSI Design flow conducted from 20-05-2013 to 01-06-2013. "Chipscope Pro Implementation"
- 5.2. Articles/Chapterspublished inBooks:
- 5.3. Bookspublished as single authororased itor:
- 5.4. Projects Guided:

a) UG: 4 b) PG: 3

- 5.5. Research Interests: Low Power VLSI, Error Detection Codes, Data Communications, Golay codes, RF MEMS.
- 5.6. Ph.D students: NA
 - a) Enrolled:b) Submitted:
 - c) Awarded:
- 5.7. Papers published in reviewed Journals:

S.N o	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impac t Factor / Citati on Index	National/ Internatio nal
1	Voice Acknowledge ment based Remote Home Computerisatio n Frame work	International Journal of Research	22366142/ March 2019 Vol :8 Issue 3	5.7	Internation al Journal
2	FPGA Implementatio n of Encoder and Decoder for Golay codes	International Journal of Advance Engineering and Research Development Volume 4, Issue 11, November - 2017	e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406	Impact Factor (SJIF): 4.72	Internation al Journal
3.	FPGA Implementatio n of Encoder and Decoder for Golay codes	International Journal of Advance Engineering and Research Development Volume 4, Issue	e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406	Impact Factor (SJIF): 4.72	Internation al Journal

		11, November - 2017			
4.	FPGA Implementatio n of SRAM Memory Testing Technique Using BISR Scheme	International Journal of Research (IJR) Volume 2, Issue 08,	e-ISSN: 2348-6848, p- ISSN: 2348-795X August 2015	3.541	Internation al Journal
5.	Implementatio n of an Ultra- Lightweight Block Cipher	International Journal & Magazine of Engineering, Technology, Management and Research	ISSN No: 2348-4845 Volume No: 2(2015), Issue No: 2 (February)	1.7450	Internation al Journal
6.	CHIPSCOPE Implementatio n of CRC circuit Architecture.	IOSR Journal of VLSI and Signal Processing	ISSN: 2319-4200, Volume:2, Issue:1, ISBN:2319- 4197.	1.608	Internation al Journal
7.	3-D Image Reconstruction from 2-D Image using Lab - VIEW	IJEAT,	ISSN : 2249-8958, Volume :2	1.121	Internation al Journal
8	Voice Acknowledge ment based Remote Home Computerisatio n Frame work	International Journal of Research	22366142/ March 2019 Vol :8 Issue 3	5.7	Internation al Journal
9	Electromagneti c Analysis of MEMS-Based Tunable EBG Bandstop Filter Using RF MEMS Switch for Ku-Band Applications	Lecture Notes in Electrical Engineering boo k series (LNEE, volume 655)	First Online: 24 June 2020 https://doi.org/10.1007 /978-981-15-3828-5- 18	1.476	Internation al Journal
10	Design and analysis of a RF MEMS shunt Switch using U- shaped	Microsystem Technologies,Mi cro- and Nano systems InformationStora ge and	ISSN 0946-7076 DOI 10.1007/s00542- 020-04864-z	1.74	Internation al Journal

	meanders for	Processing			
	low actuation	Systems			
	voltage				
11	Analysis of EBG Bandstop Filter using U - Shaped Meander type Electrostaticall y Actuated RF MEMS Switch	Microsystem Technologies,Mi cro- and Nano systems InformationStora ge and Processing Systems	First online January 2021, DOI 10.1007/s00542-020- 05157-1	1.74	SCI, Internation al Journal
12	Design and Implementatio n of Higher Performance Decimal Compressors Using Multiplexer Based Approach	Design Engineering	ISSN: 0011-9342 Year 2021 Issue: 8 Pages: 13284-13304	1.41	Scopus, Internation al Journal

5.8. Papers presented at National / International conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	SRAM Memory Testing	Institute of Research	International	30 th
1	Technique Using BISR Scheme	and Journals		Oct.2015
	New Analytical Capacitance	5 th International	International	19 th -20 th
	Modeling of Perforated Switch	Conference on		May
2	Considering Fringing effect	'Microelectronics,		2018
		Circuits and		
		Systems',		
		Micro2018		
3	Parallel Cyclic Redundency		International	21st -
	Check	6th International		22nd
	Realization	conference on		July
		innovations in		2017.
		Electronics and		
		Communcation		

		Engineering (ICIECE-2017)		
4	Design of Low Pull-In Voltage and high Isolation of step Structure Capacitive RF MEMS Switch for Satellite Applications	IEEE Electron Device Kolkata Conference (2018, IEEE EDKCON)	International	24th-25th Nov,2018
5	Electromagnetic Analysis of MEMS Based Tunable EBG Bandstop Filter using RF MEMS Switch for Ku – Band Applications	International Conference on Micro-Electronics, Electromagnetics and Telecommunications (ICMEET-2019)	International	6th-7th Dec,2019

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects:

S.	.No	Title	Agency	Period	Sanctioned	Ongoing /
					Amount	Completed

6. Awards / Honors received:

7. Motto: Knowledge is power.