Name: E Vijaya Babu

Designation: Assistant Professor

Department: ECE

Mail I'd: vijayababu\_e@vnrvjiet.in

Experience (in years): Teaching: 10.3 years Research:

NA Others (if any, specify): NA

# 1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	Pursuing	Low Power VLSI
2	M.Tech.	2013	Embedded Systems & VLSI Design
3	B.E.	2009	ECE

# 2. Teaching and Learning:

2.1. Teaching Interests:

At GATE level: Signals & Systems, Communication Systems

At College level: Signals and Systems, Analog Communications, Digital Communications, Electronic Devices and Circuits, Analog Electronic Circuits, VLSI, Low Power VISI ,Network Theory, Digital Electronics, Electro Magnetic Waves and Transmission Lines (EMTL),Antenna and wave propagation, Fibre optic Communication and Linear Control Systems

2.2. Novel Teaching & Learning Techniques adopted:

PPT presentations, YouTube video making, ICT tools usage

2.3. Involvement in curriculum updating / Design:

Involved in Curriculum Design of subjects like Signals and Systems, Analog Communications, Digital Communications

### 3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: Reading books, Listening Music
- 3.2. CCA/ECA Organized:

Organized JAM session in the event FESTRONIX-2K22 under AICTE SPICES SCHEME at Vardhaman College of Engineering from 18th-19th FEB, 2022

3.3. CCA/ECA participated:

Not Applicable

- 3.4. Counselling and Mentoring Activity: Mentored B.Tech. II year students
- 3.5. Committees involved in:

Department level: Gate Coordinator, Class In charge, Coordinator for Technical Seminars & Viva

Institute Level: Member in disciplinary Committee, Coordinator in RTOS@Vardhaman

# 4. Conference / Workshop / Seminar / Guest Lectures :

- 4.1 Conducted:
  - Organized JAM session in the event FESTRONIX-2K22 under AICTE SPICES SCHEME at Vardhamn College of Engineering from 18th 19th FEB,2022



- Organized a webinar on guidance program on "Career Opportunities" in association with ACE ACADEMY, Hyderabad at Vardhaman College of Engineering, Hyderabad on 15th March 2021
- Organized an event on Real Time emerging trends on VLSI applications at Mahaveer Institute of Science and Technology, Hyderabad on 21st Nov 2014
- Organized an event of "Techno Quest" by EC Student's Community @SRITS on 18th JAN 2010
- Organized "Paper Presentation" event in "Technomist-2K14" @ MIST in NOV 2014

#### 4.2 Attended:

- Presented a paper on "An Efficient hardware VLSI design of 4-bit ALU" at AICTE sponsored International Conference on Machine Intelligence and Green Computing held on 10th 11th December 2021 at KIT, Coimbatore.
- A two-week internship on Internet of Things (IoT) Intern at Smart Bridge Educational Services Pvt. Ltd., Hyderabad from 08th June, 2021 to 21st June, 2021.
- A two-week internship on Antenna and Microwave measurements Training at LOTUS Antenna and Microwave Technologies PVT LTD., Hyderabad from 13th May, 2019 to 25th May, 2019.
- A two-week ISTE STTP work shop on "CMOS, Mixed Signal and Radio frequency VLSI design" conducted by IIT Kharagpur from 30th January to 4th February, 2017.
- A workshop on "Ultra Low Power Communication using CC430 Microcontroller: Hands on Experiences" organized by the ECE Dept. Of GEC, held on 7th February 2015
- Presented a paper on "Design and Analysis Of Multiplexer Based 4-Bit Flash ADC"
   First International Conference on CITAS during November 30 December 1, 2018 organized by Dept. Of ECE, GEC.
- 5-Day FDP on "Digital VLSI Design and Verification" organized by Dept. of ECE, Bangalore Institute of Technology in association with Entuple Technologies and IEEE-BIT CAS from 23rd to 27th August 2021.
- AICTE-ISTE sponsored One week online induction program on "Millimeter Wave Frequencies" organized by Dept. Of ECE, Gudlavalleru Engineering College from 17th AUG 2021 to 24th AUG 2021.
- AICTE STTP on "Current trends and emerging advances in Marine navigation and communication" by Dept. Of ECE, CBIT from 23rd to 28th Nov 2020
- A 40hr FDP on "Machine Learning and Deep learning for Real time Applications", organized by E and ICT Academy and NIT Warangal from 10th to 17th Aug 2020
- A One week FDP on "Challenges and advancements in the design of IOT, Embedded and VLSI systems", organized by GEC from 8th to 13th june 2020
- A One week FDP on "Recent Trends In Vlsi And Embedded Auto Industry" CVSED,CMR TECHNICAL CAMPUS from 20-24th May2020
- A One week FDP on "VLSI Chip Design Hands On Using Open Source EDA" organized by Ministry of Electronics and Information Technology, MNIT Jaipur from July 8 to 12,2019
- A five day FDP on "Digital Signal Processors, embedded system Design and IOT" organized by LBRCE from 11th to 15th Feb,2019
- A Two day FDP on "Research Issues in Cognitive Radio Networks" organized by the Department of ECE, GEC held during 9th -10th January 2017.
- A One week FDP on "Hands on Experience in Signal Processing Applications" organized by signal processing Research Group, Department of ECE, Gudlavalleru Enginering College held during 7th -12th November 2016.

- A Two day Staff Training Programme on "Simulation of Linear and Digital Integrated Circuits and Microcontroller based Application using NI Multisim" organized by Department of ECE, GEC, held during 4-5 November 2016.
- A One week FDP on "Development of Wireless Sensor Networks using Network Simulator (NS2) Hands on experience" organized by the GEC held during 1st 5th December 2015.
- A One week refresher course on "Microprocessors and Microcontrollers" organized by R and D Centre, Department of ECE, GEC, held during 17th 21st November, 2015.
- "50-hour FDP-Communication Skills (level 1: Oral communication)" held at ELT Centre, GEC from December 2015 to April 2016

# 5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures: Not Applicable
- 5.2. Articles / Chapters published in Books: Not Applicable
- 5.3. Books published as single author or as editor: Not Applicable
- 5.4. Projects Guided:
  - a) UG:15 b) PG:03
- 5.5. Research Interests: Low Power VLSI Designs
- 5.6. Ph.D students: Not Applicable
  - 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/ISS N No.	Impa ct Facto r/ Citati on Index	National/ Internation al
1	Machine Learning Based Design Automation of CMOS Analog Circuits Using SCAmGWO Algorithm	ETRI Journal 6 <sup>th</sup> March,2022	1225-6463	1.622	Internation al
2	The reduction of Crosstalk in VLSI due to parallel bus structure using Data Compression Bus Encoding technique implemented on Artix 7 FPGA Architecture	IT in Industry Vol. 9, No.1, 2021	2203-1731	5.824	Internation al
3	Performance Analysis of Adiabatic Vedic Multipliers	Turkish Journal of Computer and Mathematics Education Vol.12 No. 5 (2021), 1429-1435	1309- 4653	-	Internation al
4	Design and Analysis of Multiplexer Based 4-Bit Flash ADC	International Journal of Engineering and Advanced Technology –	2249 – 8958	5.97	Internation al

		Volume-8, Issue- 6S2, August 2019			
5	Design and Analysis of CNFET based 2:1 mux in nano scale region	JARDCS- Vol. 9. Sp- 14 / 2017	1943023X	-	Internation al
6	FPGA Implementation of a BPSK Modem	IJERA Journal, vol.3, issue 6, 2013	2248-9622	6.465	Internation al
7	Implementation of Multicast routing protocol for wireless Ad-Hoc Networks	IJERA Journal, vol.3, issue 6, 2013	2248-9622	6.465	Internation al
8	Design and FPGA Implementation of a BPSK Modem on Modern DSP Technology for Wireless Communication	IJVDCS Journal	2322-0929	-	Internation al

5.8. Papers presented at National / International Journals :

12	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
	Design and Analysis of Multiplexer	First	International	November
1	Based 4-Bit Flash ADC	International		30 –
1		Conference on		December
		CITAS		1, 2018
	An Efficient hardware VLSI design of	AICTE	International	10th - 11th
	4-bit ALU	sponsored		December
		International		2021 at
2		Conference on		KIT,
2		Machine		Coimbatore.
		Intelligence and		
		Green		
		Computing		
3	An IoT based Advanced Health	IHIC-2022	International	May 17-
3	Monitoring System			19,2022

**5.9. Sponsored research Projects:** 

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
	Not Applicable				

# **5.10 Consultancy Projects:**

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
	Not Applicable				

# 6. Awards / Honors received:

NPTEL Awards –

- principles of signals and system GOLD
- principles of Communication Systems SILVER 2018
- Received Certificate of Appreciation for 91.65% feedback in Digital Communications by principal, Vardhaman College of Engineering
- 7. Motto: To excel in the field of Teaching in the concepts of Signals & Communications