

## **FACULTY PROFILE**

**Name of the faculty**      **V.SREELAKSHMI**

Department:    Electronics and Communication Engineering

College:        Gudlavalleru Engineering College

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### **Address for Communication**

Villa No. 17, Sri Radha Krishna Avenue, Canal Road, Edupugallu

Vijayawada – 521151

### **Academic Qualifications**

<b>S.No.</b>	<b>Name of the Degree</b>	<b>University</b>	<b>Percentage of Marks/ Grade</b>	<b>Specialization</b>	<b>Year of Pass</b>
1.	(Ph.D)	JNTUK, Kakinada	-	VLSI	Pursuing
2.	M.Tech.	JNTU, Hyderabad	76%	VLSI System Design	2011
3.	B.Tech.	JNTU, Hyderabad	69%	Electronics and Communication Engineering	2004
4.	Diploma	Board of Technical Education, A.P	72%	Electronics and Communication Engineering	2000
5.	S.S.C	BSE, A.P	80%	-	1997

### **Professional Experience**

<b>S.No.</b>	<b>Designation</b>	<b>Institution Name</b>	<b>Working Period</b>	
			<b>From</b>	<b>To</b>
1.	Assistant Professor	Gudlavalleru Engineering College, Gudlavalleru	June 2015	Till Date

2.	Sr.Asst.Professor	CVR College of Engineering, Hyderabad	July 2012	May 2015
3.	Assistant Professor	CVR College of Engineering, Hyderabad	April2007	June 2012
4.	Assistant Professor	Ellenki college of Engineering &Technology,Hyderabad	July 2005	Mar 2007

### Professional Body Membership

S.No.	Name of the Professional body	Membership Number
1.	Institution of Engineers	M-153079-2

### Papers Published in JournalsNo. :6

- V.Sreelakshmi, G.Siva prasad, B.Divya, Ch.N.B.Bhavani, B.Pratap Reddypublished a paper on “Design And Analysis Of Approximate Multiplier With Reconfigurable Reduction” in International Journal of Novel Research and Development. Volume 8, Issue 3, March 2023.
- V.Sree Lakshmi, M.Sona, K.Harsha Vardhan, K.Lokesh Nagendra Kumar, K.Manoj published a paper on “ Heart Attack Detection By Heart Rate Monitoring System” in International Journal of All Research Education and Scientific Methods (IJARESM). Volume 10, Issue 4, April-2022
- Sreelakshmi. Vadlamudi, Syamala Yarlagadda published a paper on “Design and Performance Analysis of Approximate Multiplier using different Adders” in Journal of Information and Computational Science in Vol.12, Issue -2, ISSN: 1548-7741
- V.Sreelakshmi, V. Supriya, P.Sushmitha, T.Venkat Lakshmi, K.H. Sai Kumarpublished a paper on “Trackbot Assistance for Industries” in IJRECE Vol. 7 Issue 1 (January- March 2019) ISSN: 2393-9028 (Print) | ISSN: 2348-2281 (Online)
- Priyadarshini.V, V.Sreelakshmi, S.Bhavanipublished a paper on “ Design and Analysis of Approximate Multipliers”in IJRECE Vol. 6. Issue 4 October-December, 2018
- B. Anil Babu, V. Sree Lakshmi published a paperon “VLSI Architecture of Shared Multiplier Scheduling Scheme for Reconfigurable FFT/IFFT Processor”. in IJECT Vol. 7, Issue 3, July - Sept 2016

## **NPTEL Certification: 5**

- Successfully Completed “ Microprocessors and Interfacing” with consolidated Score of 97% (top 1%).
- Successfully Completed “ Digital Circuits” with consolidated Score of 87% (top 1%).
- Successfully Completed “ Embedded system design with ARM” with consolidated Score of 92% (top 5%).
- Successfully Completed “ Hardware modeling using Verilog” with consolidated Score of 85%.
- Successfully Completed “ Microprocessors and Microcontrollers” with consolidated Score of 94% (top 1%).

## **edx Certifications: 5**

- Successfully Completed “IoT101:Build Your First IoT Application with Arm” offered by ArmEducationX.
- Successfully Completed “RFP101:Programming 101 -An Introduction toPython for Educators”offered by RaspberryPiFoundation.
- Successfully Completed “python1.1:Python Programming: Basic Skills”offered by codio.
- Successfully Completed “python2.1:Python Programming: IntermediateConcepts” offered by codio.
- Successfully Completed “python3.1:Python Programming: Object-Oriented Design offered by codio.

## **Workshops OrganizedNo. : 3**

- One week workshop on in “Refresher course on Embedded systems design” conducted in CVR college of engineering from 26<sup>th</sup> November to 1<sup>st</sup> December 2007.
- Threedays workshop on “Standard Cell Based ASIC design Flow” using cadence tools conducted on 20<sup>th</sup> June 2012in CVR College of Engineering.
- Two days workshop on “Xilinx FPGA Design Flow” conducted in Technical fest ciencia 2012in CVRCollege of Engineering.

## **Workshops /Conferences /Seminars/FDP's AttendedNo. :40**

- Attended an online one week FDP on “Power-Efficient VLSI-Based HardwareAccelerators in High-Performance Computing (HPC)” organized by BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, Hyderabad during 20<sup>th</sup> to 25<sup>th</sup>January 2025.
- Attended an online one week workshop on “Hands on Mastering RTOS and IoT Pro development boards” organized by CVR College of Engineering, Hyderabad during 13<sup>th</sup> to 19<sup>th</sup>April 2024.
- Attended an online one week FDP on “IoT, Industry 4.0 and Stress Management” organized by Seshadri Rao Gudlavalleru Engineering College, Gudlavalleruin association with IETE, vijayawada during 17<sup>th</sup> to 22<sup>nd</sup>July 2023.
- Attended anonline International webinar on Research Publications impact writing and understanding the Editorial Process conducted by ELIXIR Educational services during 10<sup>th</sup> to 11<sup>th</sup> July 2021.
- Attended an online Three day FDP on “Research Applications in Machine Learning and Deep learning” organized by Rajasthan Technical University, kota and B K Birla Institute of Engineering and Technology, Pilani during 18<sup>th</sup> to 20<sup>th</sup> December 2020.
- Attended an online FDP on “Internet of Thongs (IOT)” conducted by Gudlavalleru Engineering Collegeand ATAL Academy during 7<sup>th</sup> to 11<sup>th</sup> December 2020.
- Attended an online FDP on “Recent Trends andApplications in Biomedical Signal and Image Processing” conducted by G. H. Rasoni College of Engineering, Nagpur and ATAL Academy during 21<sup>st</sup> to 25<sup>th</sup> September 2020.
- Attended an online FDP on “Internet of Thongs (IOT)” conducted by National Institute of Technical Teachers Training and Research, MHRD and ATAL Academy during 7<sup>th</sup> to 11<sup>th</sup> September 2020.
- Attended a AICTE Sponsored STTP conducted by Gudlavalleru Engineering College on “Blockchain Architecture Design and Use Cases” Phase- III held during 24<sup>th</sup> to 29<sup>th</sup> August 2020.
- Attended a AICTE Sponsored STTP conducted by Gudlavalleru Engineering College on “Blockchain Architecture Design and Use Cases” Phase- II held during 17<sup>th</sup> to 22<sup>nd</sup> August 2020.

- Attended a AICTE Sponsored STTP conducted by Gudlavalleru Engineering College on “Blockchain Architecture Design and Use Cases” Phase- I held during 10<sup>th</sup> to 15<sup>th</sup> August 2020.
- Attended aonline FDPby Gudlavalleru Engineering College on “Intellectual Property Rights & Patents - A View” held during 10<sup>th</sup> to 12<sup>th</sup> August 2020.
- Attended a Refresher Course conducted by Gudlavalleru Engineering College on “Embedded System Design” held during 27<sup>th</sup> July to 1<sup>st</sup> August 2020.
- Attended a webinar conducted by CoreEL Technologies and Mentor on “Physical design in VLSI and Challenges” on 12<sup>th</sup> June 2020.
- Attended a webinar conducted by Gudlavalleru Engineering College on “Impact of Covid in Engineering Education & Way forward ” on 9<sup>th</sup> June 2020.
- Attended a one week International online Knowledge development program conducted by Gudlavalleru Engineering College on “ Challenges and Advancements in the design of IOT , Embedded and VLSI systems: A Researchers View”held during8<sup>th</sup> to 13<sup>th</sup> June 2020.
- Attended a live online Short term course conducted by Tirumala Engineering College on “Artificial intelligence Machine Learning and its Applications held during 29<sup>th</sup>May to2<sup>nd</sup>June 2020.
- Attended a webinar conducted by Gudlavalleru Engineering College on “Radio Frequency Measurements for Cellular and Wireless Communication Systems” on 25<sup>th</sup> May 2020.
- Attended a webinar conducted by CoreEL Technologies and Xilinx on “ Custom IP Design and Validation Using Vivado” on 22<sup>nd</sup> May 2020.
- Attended aonline FDP conducted by Miracle Educational Society Group of Institutions on “VLSI Digital Circuits and Testing Techniques” held during 21<sup>st</sup> to 23<sup>rd</sup>May 2020.
- Attended aonline national level FDP by Andhraloyala Institute of Engineering & Technology on “Modern Research Trends in communication, signal processing and VLSI/MEMS” held during 19<sup>th</sup> to 23<sup>rd</sup>May 2020.
- Attended a online certification program conducted by Apply volt on “Industrial IOT” held during 19<sup>th</sup> to 23<sup>rd</sup> May 2020.
- Attended one week FDP on “ Data Acquisition and RT using LabVIEW” in Gudlavalleru Engineering College during 25<sup>th</sup> Nov-30<sup>th</sup> Nov 2019.

- Attended Three days workshop on “Advanced Development Tools based on IOT” in Gudlavalleru Engineering College during 11<sup>th</sup> Nov-13<sup>th</sup> Nov 2019.
- Attended one week FDP on” Trends in Reconfigurable (FPGA) SoC Design” organized by E&ICT Academy, NIT, Warangal at NITW from 25<sup>th</sup> -30<sup>th</sup> November 2018.
- Attended One Week FDP on “ Communications and Signal processing” in Gudlavalleru Engineering College during 29<sup>th</sup> Oct-3<sup>rd</sup> Nov 2018.
- Attended One Week FDP on “ CMOS Integrated Circuits for Instrumentation and IOT Applications” organized by E&ICT Academy, NIT, Warangal at VR Siddartha Engineering College from 22<sup>nd</sup>-28<sup>th</sup> Jan 2018.
- Attended One Week FDP on “ Signal and Image Processing” in Gudlavalleru Engineering College during 13<sup>th</sup>-18<sup>th</sup> Nov 2017.
- Attended Two day FDP on “ Advances in VLSI Design and Embedded Systems” in Gudlavalleru Engineering College during 6<sup>th</sup>-7<sup>th</sup> Nov 2017.
- Participated in Two week ISTE-STTP on “ CMOS,Mixed Signal and Radio frequency VLSI Design” conducted by IIT, Kharagpur from 30<sup>th</sup> Jan 2017 to 4<sup>th</sup> Feb 2017.
- Attended Five day Faculty Development Programme “ Custom IC Design and ASIC Implementation Using Cadence EDA Tools” during 28<sup>th</sup> Nov-2<sup>nd</sup> Dec 2016 at VR siddartha Engineering College
- One week Faculty Development Programme on “Hands on Experience in Signal Processing Applications”held during 7<sup>th</sup>-12<sup>th</sup>November,2016 at Gudlavalleru Engineering College.
- Attended Three day workshop in Andhra Loyala Institute of Engineering and Technology on “ VLSI design Techniques using XILINX and Mentor Graphics EDA Tools” conducted on 23<sup>rd</sup> to 25<sup>th</sup>june 2016.
- Participated in the 50 hour FDP- communication Skills held at English Language Teaching Centre, Gudlavalleru Engineering College from December 2015 to April 2016 and successfully completed with grade B.
- Attended One Week Faculty Development Program inGudlavalleru Engineering College on “Development of Wireless Sensor Networks using Network simulator (NS2)-Hands on experience” conducted on 1<sup>st</sup> to 5<sup>th</sup> Dec 2015.
- Attended One Week Refresher Course inGudlavalleru Engineering College on “Microprocessors and Micro Controllers” conducted on 17<sup>th</sup> to 21<sup>st</sup> Nov 2015.

- Attended Three days Workshop in CVR college of Engineering on “ Cadence tools Installation “ in November 2014.
- Attended one day Workshop in JNTUH on “ Recent trends in Embedded Systems in October 2013.
- Attended Three days Workshop in CVR college of Engineering on “ Standard cell based ASIC Design Flow” using Cadence in July 2012.
- Attended Workshop in Dr. B.V Raju institute of technology on “ FPGA based digital and embedded systems design” as a part of the indo-US engineering faculty leadership institute from 8<sup>th</sup> to 9<sup>th</sup> July 2010.

### **Certifications/Training Programs AttendedNo. :3**

- Attended one week training programme on “Microchip ATMEGA16” organized by Eduskills under Microchip Academic Program during 12<sup>th</sup> to 19<sup>th</sup> September 2020
- Attended Two day training Programme on “ Mentor Graphics Tools” organized by department of ECE, Gudlavalleru Engineering College during 31<sup>st</sup> August and 1<sup>st</sup> September 2017.
- Attended Two-day training program on " Simulation of Linear & Digital Integrated Circuits and Microcontroller based Applications" using NI Multisim organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 4-6 November 2016.

### **Guest Lectures DeliveredNo. :3**

- One of the resource person in “Embedded System Design” Refresher Course organized by Department of ECE, Gudlavalleru Engineering College during 27<sup>th</sup> July -1<sup>st</sup> August 2020.
- One of the resource person in “Standard Cell Based ASIC Design Flow using cadence tools” workshop organized by Department of ECE, CVR College of Engineering during 20<sup>th</sup> -22<sup>nd</sup> June 2012.
- One of the resource person in “Embedded system Design” Refresher Course organized by Department of EIE, CVR College of Engineering during 26<sup>th</sup> -1<sup>st</sup> Dec 2007.

## **Subjects Handled**

### **Under Graduation**

- Digital logic and Computer Organization
- Computer Organization and Microprocessors
- Computer Organization & Architecture
- Microprocessor and Microcontrollers
- Microcontrollers and Applications
- Embedded and Real Time systems
- Advanced Microcontrollers
- Linear IC Applications
- VLSI Design
- Digital Design through Verilog
- Satellite communications
- Digital Circuit Design
- Automotive Electronics
- Embedded System Design

### **Post Graduation**

- Design of fault tolerant systems
- CPLD and FPGA architectures and applications
- Micro controllers for embedded Systems
- System On chip Architecture
- Advanced Microcontrollers
- Hardware Software Co Design

## **Laboratories Handled**

### **Under Graduation**

- E-CAD Lab
- Microprocessors and Microcontrollers Lab
- VLSI and Embedded systems design lab
- Linear IC Applications Lab
- Digital Circuit Design Lab

### **Post Graduation**

- Embedded systems Lab



- HDL Lab

## Other Responsibilities

### College Level (in GEC)

- One of the coordinator in cultural committee in GECFEST 2018 and 2019

### Department Level (in GEC)

- e-look ( News letter)Coordinator.
- Project section wise coordinator frompast seven years Academic years.
- Class In charge for various semesters.

## Projects Guided

### Under Graduation

S.No.	Name of the project	Year
1.	Design and Evaluation of a Compact Approximate Multiplier with Optimized Area utilization	2024
2.	Design and Analysis of Approximate Multiplier with Reconfigurable Truncation	2023
3.	Heart Attack detection by heart Rate Monitoring System	2022
4.	Automatic Medicine Remainder using Raspberry pi	2021
5.	Smart ATM Security System	2020
6.	Trackbot Assistance for Industries	2019
7.	Design of Shift Register using Pulsed Latches	2018
8.	Design of 4-Bit Parallel Adder using Low power 8-Transistor 1-Bit Full Adder	2017
9.	FPGA Implementation of Area efficient SQRT CS Adder	2016
10.	FPGA implementation of reducedArea multi-bit flip-flop	2015

11.	VLSI implementation of flagged binary adder with constant addition	2015
12.	FPGA implementation of Vedic Multiplier	2015
13.	Design and implementation of extended Golay encoder and decoder using verilog	2014
14.	FPGA implementation of Radix-8 booth encoded modulo $2^n-1$ multipliers for residue number system	2014
15.	FPGA implementation of Residue to Binary Converter	2012

### Post Graduation

S.No.	Name of the project	Year
1.	VLSI Architecture of Shared Multiplier Scheduling Scheme for Reconfigurable FFT/IFFT Processor	2016
2.	ARM based Vehicle Security Pollution Indicating and Controlling.	2014
3.	FPGA implementation of RSA Processor	2013
4.	VLSI Implementation of weighted modulo $2^n + 1$ adder	2012

### Books Published No. :2

1. Co-author for chapter 3.3 titled “Microprocessors and Interfacing Laboratory” of Electronics and Communication Engineering laboratory Manual series 2 with ISBN – 978-1-4276-5564-6 in the year 2016
2. Co-author for chapter 3.1 titled “Digital System Design and DICA Laboratory” of Electronics and Communication Engineering laboratory Manual series 2 with ISBN – 978-1-4276-5563-9 in the year 2016