



**Dr. G. V.Sridhar**

**Professor**

**Department of Electronics & communication Engineering**

**Raghu Engineering College, Visakhapatnam - 531162,**

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**Interests:** Medical Electronics; Bio-Medical Signal Processing; Embedded Systems; IoT; Communications.

**Course Taught Previously**

**PG.**

- Embedded Systems
- Wireless Communications
- Analog system design
- Embedded System Concepts
- VLSI Design

**UG.**

- Linear Integrated circuit Applications.
- Bio-Medical Engineering.
- Bio-Medical Instrumentation.
- Analog Communications
- Cellular And Mobile Communications.
- Radar Engineering
- Microprocessors and Microcontrollers
- Embedded Systems
- Electronic Measurements and Instrumentation
- Computer Organization
- Communication Systems
- Linear and Digital IC Applications
- Analog Electronics

## Laboratories Handled

- Linear Integrated circuit Applications Lab.
- Analog Communications Lab
- IOT Lab
- Electronic Devices Lab

## Publications International Journals

1. "AN EFFECTIVE AND PORTABLE IOT BASED AIR POLLUTION MONITORING SYSTEM" The Seybold Report,ISSN:1533-9211,pp998-1007,DOI 10.5281/zenodo.7252424,V 1 7 . I 1 0,October 2022.
2. "Performance analysis of Coarse Quantization for Multiuser MIMO OFDM System" TELEMATIQUE,ISSN:1856-4194,pp2746-2760,Volume21 Issue1, 2022.
3. "Design of Smart COVID19 Vaccines Potency Monitoring System"The International journal of analytical and experimental modal analysis,Volume XIII, Issue XI, November/2021,P 36 - 46 "Speech Enhancement for Hearing Aid People". Mukht Shabd Journal, Vol. 10, Issue 1, pp.972-976, January 2021.
4. "Deep Learning Model for ECG classification to identify cardiovascular diseases". *Journal of Xi'an University of Architecture and Technology*, Vol. 12, Issue 8, pp.1492-1496, Aug 2020.
5. "Surveillance PIBOT using Raspberry Pi" Page 61-68 DOI:16.10089.IJR October 2020.
6. "Event evoked bio-signal classification using Hilbert transform for Brain Computer Interface", *International Journal of Management, Technology and Engineering*, Vol. 9, Issue 4, pp.5806-5817, Aug 2019.
7. FEATURE SELECTION USING CUCKOO SEARCH FOR ELECTROCARDIOGRAM SIGNAL IN CARDIAC ARRHYTHMIA"International Journal of Management, Technology And Engineering,P4252-4258,ISSN NO : 2249-7455,Volume IX, Issue I, JANUARY/2019
8. "Evaluation of Various Methods for channel estimation in Multicell Multiuser Discrete Wavelet MIMO OFDM Systems",*International Journal of Management, Technology and Engineering*, Volume 8, Issue 12, pp. 5806-5817, December 2018.
9. "A Hybrid PSO with Multilayer Perceptron for EEG Classification",*International Journal of Management, Technology and Engineering*, Vol. 8, Issue 12, pp. 5797-5805, Dec. 2018.
10. "An Improved Multi-Layer Perception for BCI with Evolutionary Optimization".IJIRST,Volume:2, Issue:1, pp.328-332, July 2015.
11. "Coding and Analysis of Cracked Road Image Using Random Transform and Turbo codes" Published in International Journal Of Science ,Engineering and Technology Research, June-2014,Volume,No.03,Issue No.06,P 1668-1672.
12. "Automation of Argon unit using Neural Network Predictive Control" Published in International Journal Of Advance research in Computer science and Management Studies, January 2014,Volume,No.02,Issue No.01

13. "Implementation of Robust Water Marking Technique using SVD Algorithm with GUI Representation" Published in International Journal Of Advance research in Computer science and Management Studies, January 2014,Volume,No.02,Issue No.01
14. "AnNeuralNetworkApproach forEEGClassification inBCI". IJCST,Volume3,Issue10,October, 2012.
15. "Adaptive Band width allocation in wireless networks with multiple degradable quality of service" Published in IOSR Journal of Electronics and Communication Engineering,Vol.2,Issue 4,Sep-Oct,2012.
16. "Event Evoked Signal Classification in Frequency Domain for Brain Computer Interface"published in International Journal of Computer Applications (IJCA) May 2012 Edition.
17. "An Neural Network Approach for EEG Classification in BCI" published in International Journal of Computer Science and Telecommunications,Volume 3,Issue 10,October 2012.

### Conference Proceedings

1. "A Birdsong denoising using Cascaded Combination of Phase Spectrum Compensation and Wavelets", *IEEE International Conference on Computing, Communication and Power Technology*, jointly organized by Raghu Educational Society & IEEE Vizag Bay section Visakhapatnam, during 7-8 Jan, 2022.
2. "Speech enhancement using beam forming Kalman filter in car noisy environment" **presented in** ICMEET-2019,6<sup>th</sup> to 7<sup>th</sup> DEC ,Raghu Engineering College,Visakhapatnam
3. Performance Analysis Of different digital modulation Schemes in Rayleigh Channel with Antenna Diversity Reception" presented in 49<sup>th</sup> MID TERM SYMPOSIUM(MTS-2018) on Recent Trends in Wireless Communications during 8-9 April,2018,IETE,Visakhapatnam
4. FRAMEWORK FOR CLASSIFYING CARDIAC ARRHYTHMIA" **presented in** ICMEET-2017,6<sup>th</sup> to 7<sup>th</sup> JAN ,Raghu Engineering College,Visakhapatnam
5. A Novel Approach for Maneuvering Object Tracking using Deformation Detection" presented in conference organized by International Journal of Scientific Engineering and Technology Research at HYD, during JAN -2014
6. "Estimation of Path Loss at Wireless Network Using WiMax Technology" presented in conference organized by International Journal of VLSI System Design and Communication Systems ,HYD during JAN-2014.
7. "Color video random impulse noise removal using Fuzzy Filter" in International conference on recent trends in Electrical,Electronics&Information Technology,held at Trivandrum on 11<sup>th</sup> November 2012
8. "Authentication of wireless nodes with a symmetric key by using TPM" presented in National Conference ,ACCT -2012, IETE,NSTL on 6<sup>th</sup> July 2012.

9. “Adaptive Band width allocation in wireless networks with multiple degradable quality of service” presented in National Conference ,ACCT -2012, IETE,NSTL on 6<sup>th</sup> July 2012.
10. EEG Signal Classification in Frequency domain for Brain Computer Interface”presented in National Conference ,ACCT -2012, IETE,NSTL on 6<sup>th</sup> to 7<sup>th</sup> July 2012.

### **PHDs Supervised**

<b>Name of Student</b>	<b>Area of Research</b>	<b>Remarks *</b>
Mr.V.Ravi Tejeswi	ECG Signal Classification using optimization techniques	Ongoing

### **Workshops/Conferences/Seminars/Symposiums organised**

<b>S. No</b>	<b>Name of the Programme</b>	<b>Dates</b>	<b>Role</b>
1.	A Two Day National Symposium on “Technocom2K5”	OCT 5 <sup>th</sup> -6 <sup>th</sup> , 2005	Convenor
2.	A Two Day National Symposium on “Texazion 2010”	July 30-31, 2010	Convenor
3	Seminar on VLSI design and its practical applications, Mr. Rajesh Satyavadha, Sr.PDK Developer Synopsys India PVT LTD	<b>27<sup>th</sup> DEC , 2017</b>	Coordinator
4	A Technical event conducted by ECE department of REC in order to bring out the hands-on technical competitive skills of the students. Two events 1.Poster presentation. 2. Project Expo are	10 <sup>th</sup> -11 <sup>th</sup> Jan 2018	Coordinator

	conducted		
5	Guest lecture on Digital communications by Dr.CH.Srinivasa rao, JNTU(V) to III.B.TECH, ECE Students	16 <sup>th</sup> AUG,2018	Councillor
6.	A Technical event conducted by ECE dept of REC in order to bring out the hands-on technical competitive skills of the students. Three events Poster presentation, Project Expo, Make A THON are conducted	3-5 Jan 2019	Convinor
7.	A two day workshop on “Work Shop on Artificial Intelligence &Machine Learning” in association with QUALCOMM Pvt Ltd, Hyderabad	22 <sup>nd</sup> -23 <sup>rd</sup> FEB,2019	Councillor
8.	Seminar on “Avionics packages realization” K.Murali Krishna Rao, Scientist F,DRDO	16 <sup>th</sup> March,2019	Councillor
9.	Workshop on “Antenna Fabrication and Measurements “ <i>in association with Anritsu India Pvt. Ltd, Hyderabad</i>	30 <sup>th</sup> JULY 2019	Councillor
10.	Seminar on “Fundamentals of DSP and Applications” CH.Challam Naidu , Scientist D,NSTL	3rd Aug 2019	Councillor
11.	IEEE Xtreme Program 13.0	October 19-20,2019	<b>IEEE SB,Counselor</b>

12.	Internal Smart India HACKATHON 2020	23 <sup>rd</sup> JAN 2020	<b>ISF,Counselor</b>
13.	Seminar on” wireless &IP Networks” Mr.S .Sanjeev Sharma, Systems Engineer, Rucus Networks, Colorado, USA	19 <sup>th</sup> FEB 2020	<b>IEEE,Counselor</b>
14.	Webinar on ASIC-SOC Design Flow for students & Researchers by Mr.Y.Bhanu Prakash, Principal Engineer, MOSCHIP Technologies, Hyderabad.	13 <sup>th</sup> JUN,2020	<b>IEEE,Counselor</b>
15.	On line Skill development program on “Emerging telecom trends” by BSNL AP Circle.	5 <sup>th</sup> AUG,2020	Coordinator
16.	IEEE Xtreme Program 14.0	October 23-24,2020	IEEE SB, Counsellor
17.	webinar on “ <b>High Resolution Time-Frequency Analysis Methods for Non-Stationary Signal Processing</b> ”	17 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
18.	webinar on “ <b>Electromagnetics Theory &amp; Interference measurements</b> ”	18 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
19.	<b>Webinar on “Importance of Machine Learning in IoT” by Dr. Basudeba</b>	19 <sup>th</sup> DEC,2020	IEEE SB, Counsellor

	Behera Assistant Professor, Dept. of ECE,NIT, Jamshedpur, India.		
20.	<b>On line Two day work shop on”Real time Micro Processor &amp; Micro Controller” In association with Robocoupler Pvt Ltd.</b>	21 <sup>st</sup> &22 <sup>nd</sup> ,DEC,2020	IEEE SB, Counsellor
21.	<b>webinar on “Composing a Resume An Exploration Of the Verbatim” by Dr. Ch.Krishnaveer Abhishek Assistant Professor, Dept. of Journalism &amp; Mass Communication, St Joseph’s College(A),Vizag</b>	24 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
22.	webinar on <b>“Career Resilience”</b>	26 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
23.	webinar on <b>“AI and Its Applications”</b>	27 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
24.	webinar on <b>“Estimation &amp; Prediction in Signal Processing Applications Using Kalman Filter</b>	28 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
25,	webinar on <b>“Python libraries for efficient use in Data Science”</b>	30 <sup>th</sup> DEC,2020	IEEE SB, Counsellor
26.	Webinar on “ Anlog IC Design Flow An Industry Approach” by Mr.Rajesh Satyavada Senior CAD Engineer, Intel Corporation, Banglore.	19 <sup>th</sup> April,2021	IEEE SB, Counsellor

27.	Webinar on “ Emerging Technologies Industry 4.0” by Mr.Chandra Sekhar Konidena, Director, Hexagon Pvt Ltd, Hyderabad.	29 <sup>th</sup> May,2021	IEEE SB, Counselor
28.	Webinar on “ Emerging Technologies & Career Oppurtunities” by Mr.Kuna VSR Kishore, Staff Engineer, Honeywell Pvt Ltd, Banglore.	19 <sup>th</sup> JUN,2021	ISF,Counselor
29.	IEEE Xtreme 15.0	23 <sup>rd</sup> -24 <sup>th</sup> OCT, 2021	IEEE SB, Counselor
30.	Industry Interaction on “Electronics Applications in Defense” by Mr.K.V.Murali Krishna Rao, Scientist F,DRDL Hyd.	25 <sup>th</sup> OCT,2021	ISF,Counselor
31.	Two day work shop on “Embedded systems with Integrated IOT” In association with Robocoupler Pvt Ltd.(Under AICTE Spices Scheme)	15 <sup>th</sup> & 16 <sup>th</sup> , NOV,2021	Coordinator
32.	TECHIEEE	6 <sup>th</sup> January,2022	IEEE SB, Counselor
33.	<i>IEEE ic3p 2022 IEEE International Conference on Computing, Communication and Power Technology</i> jointly organized by Raghu Educational Society & IEEE Vizag Bay section Visakhapatnam	7-8 Jan, 2022	Finance Committee Member
34.	Seminar on “Skills and Challenges for future Engineers”	4 <sup>th</sup> March,2022	IEEE SB, Counselor

35.	WORLD TELECOMMUNICATION DAY	17 <sup>th</sup> May,2022	ISF,Counselor
36.	Workshop on "Amateur Radio Communication System"	13 <sup>th</sup> September,2022	Coordinator
37.	IEEE Xtreme 16.0	22 <sup>nd</sup> -23 <sup>rd</sup> OCT, 2022	IEEE SB, Counselor

### **Seminars, Workshops and STTPs**

S. No	Name of the Programme	Dates	Sponsored by
1.	FDP on "Faculty Development Programme on Entrepreneurship" organized by APITCO Ltd at Entrepreneurship Development Centre, GITAM, Visakhapatnam .	FEB 21 <sup>st</sup> to MAR 5 <sup>th</sup> ,2005.	-
2.	FDP on "Signal Processing Techniques Applied to Image Processing", at VIIT, Visakhapatnam .	21 <sup>st</sup> & 22 <sup>nd</sup> October 2011.	-
3.	A Two-day National Work Shop on "Advances in Signal & Image Processing"(ASIP-2008) organized by JNTU(K),Kakinada.	May 25 <sup>th</sup> to May 31 <sup>st</sup> ,2009	-
4.	Work Shop on "Technology CAD for VLSI Design"organised by IIT Kharagpur .	May 31 <sup>th</sup> to June 6 <sup>th</sup> ,2009.	-
5.	Work Shop on "Fundamentals of RF Engineering for Modern Wireless Systems" organized by IIT Kharagpur .	OCT 20 <sup>th</sup> to OCT 21 <sup>st</sup> ,2009.	-
6.	A Three Day Staff Development Programme on "Electromagnetics and RF Fundamentals", organized by GVP College of Engg.	22nd to 24th Jan 2016.	-
7.	A Three Day "National Workshop on Advanced Antenna Design" (NWAAD-2K16) at A.U. College of	19th to 21st October 2016.	-

	Engineering .		
8.	“One Week FDP on Real Time Embedded Systems and IOT , Its Applications “Organized by E&ICT Academy ,NIT Warangal at Raghu InstituteOf Technology,Visakhapatnam.	2 <sup>nd</sup> – 8 <sup>th</sup> JUN,2018.	-
9.	“One Week FDP on Signal Processing for 5G Wireless Cmmunications”Organized by E&ICT Academy ,NIT Warangal at Lendi Institute Of Engg&Technology,VZM.	5 <sup>th</sup> – 10 <sup>th</sup> NOV,2018.	-
10.	NAAC Sponsored Two days workshop on “Quality Enhancement in Curriculum Design and Development For Higher Education Institutions” organized by Raghu Engineering College.	29 <sup>th</sup> ,30 <sup>th</sup> NOV,2018	-
11.	Webinar on” Research publications ,Process, Credentials & Outcomes” organized by BITS, Visakhapatnam .	9 <sup>th</sup> May,2020	-
13.	“Faculty Awareness Programme on Outcome Based Education (OBE) and NBA Accreditation“ organised by Sinhgad Institute of Technology and Science, Narhe, Pune.	9 <sup>th</sup> May,2020	-
14.	A National Level Five Day Faculty Development Programme on “OBE-NBA Process” organized by Internal Quality Assurance (IQAC), NARASARAOPETA ENGINEERING COLLEGE(AUTONOMOUS) , NARASARAOPET.	15th to 19th May, 2020.	-
15.	One week online FDP on “Teaching, Learning, and Assessment Strategies” Organized by IEEE Education Society Chapter of IEEE Hyderabad Section.	18 <sup>th</sup> – 23 <sup>rd</sup> May 2020	-
16.	Webinar on “Computational Electromagnetic techniques for different RF Microwave and Millimetre-wave Application” organized by G.V.P College of degree and PG(A), Visakhapatnam.	25 <sup>th</sup> May,2020	-

17.	A two day Faculty Development Programme on “Multi Carrier Modulation in Broadband Communication & Technology challenges on 5G” organized by ECE Department Raghu ENGINEERING COLLEGE (AUTONOMOUS) , Visakhapatnam.	29 <sup>th</sup> to 30 <sup>th</sup> May, 2020.	-
18.	Webinar on “Overview on VLSI” conducted by Departments of R&D and ECE, Gitanjali Institute of technology, Nellore.	4th June, 2020.	-
19.	Online Training Program on Electronic System Design Flow - Architecture & Schematic Design Capture using OrCAD PSpice conducted IEEE Bangalore.	4 <sup>th</sup> June 2020.	-
20.	Two day online Web series on “Biomedical Imaging”, organized by the Department of Computer Science & Engineering, Keshav Memorial Institute of Technology, Hyderabad, Telangana.	16th to 17th June 2020	-
21.	40 Hour FDP on “Machine Learning In Real Time Embedded & IoT Applications” organized by Electronics & ICT academy NIT Warangal and Raghu Engineering College, Visakhapatnam.	02-05-2022 to 12-05-2022.	-
22.	6 days National Level Virtual Workshop on “Medical Image and signal Processing ,MIS2P’21 organized by the department of CSE, Sasi Institute of Technology & Engineering, W.G.District.	07-03-2022 to 12-03-2022	-
23.	SERB Funded 5-Day National E-workshop on Medical Image Analysis using Artificial Intelligence (MIAAI 2022) organized by GVP College of engineering(A),Visakhapatnam.	25-04-2022 to 29-04-2022	-

## Projects:

### Sponsored R & D, Consultancy Projects:

S. No	Title of Project	Funding Agency	Financial Outlay	Project Period	Project Status
1.	SPICES	AICTE	1 Lakh	1 Year	Bills to be Submitted

## Patents Published:

1. Published an Indian Patent “DEEP LEARNING BASED CLASSIFICATION OF IMAGES CAPTURED USING VARIOUS IMAGING MEDICAL MODALITIES FOR KIDNEY RELATED AILMENTS ALONG WITH TREATMENT SUGGESTIVE TECHNIQUE” on 12/08/2022.

Application No: 202241043738 A

## Authored Text Books:

1. “Microcontroller and It’s Applications” ISBN978-93-5625-504-3, Scientific International Publishing House, 2022.

## Editor/Reviewer:

1. Editorial Board Member IJARTMS (International Journal of Advanced Research In Technology and Management Sciences)

2. Reviewer *IEEE ic3p 2022 IEEE International Conference on Computing, Communication and Power Technology.*

3. Reviewer IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT – 2021).

4. Reviewer ICMEA 2018

## Professional Memberships:

1. Life Member Fellow of the Institution of Electronics and Telecommunication Engineers FIETE Membership No: F503194.

2. IEEE Senior Member Membership No : 94305923.

3. Life Member Biomedical Engineering Society of India Member Membership No : 1382

4. Life Senior Member WAMS Society : #3020

## Awards and Honors

1. Best Teacher Award from JNTU Kakinada, 2010.

## Additional Responsibility

### RESPONSIBILITIES WITHIN THE INSTITUTE:

1. Member of Academic Planning and Monitoring Committee, REC, Visakhapatnam
2. Additional Controller of Examinations at Raghu Engg College, Visakhapatnam
3. Member of IQAC Committee, REC, Visakhapatnam
4. Member of NBA & NAAC, Raghu Engg College, Visakhapatnam
5. Member of Board of Studies, ECE department, REC, Visakhapatnam
6. HoD, ECE for **Four** years from 2013 Aug - 2017 March at Avanthi Institute of Engg & Technology, Tagarapuvalasa, Visakhapatnam
7. HoD, ECE for **Seven** years from 2006 Jun - 2013 Aug at AL Ameer College of Engg & IT, Visakhapatnam
8. Examination In-charge for seven years from 2005 July - 2012 Jun at AL Ameer College of Engg & IT, Visakhapatnam
9. Academic Coordinator for two years at AL Ameer College of Engg & IT, Visakhapatnam
10. Student Counselor for IETE Student Forum (ISF) at Raghu Engg College, Visakhapatnam for five years.
11. Student Counselor for IEEE Student Branch at Raghu Engg College, Visakhapatnam for five years
12. Adviser for IEEE Signal Processing Society - Student Branch, at Raghu Engg College, Visakhapatnam. [SEP]
13. Procter for IEEE Xtreme's 13.0, 14.0, 15.0 & 16.0 (world wide 24 Hours Coding Competition) during 2019, 2020, 2021 & 2022.