# Dr. RAJESH GUNDLAPALLE

Associate Professor/ECE Contact No(s).: +918919002384/+918500952735 Email : rajesh.gundlapalli@gmail.com https://vidwan.inflibnet.ac.in//profile/175374 Experience: 16 years (14 year + 2 year)



## **CAREER SUMMARY**

- ✓ Progressive faculty with extensive practical knowledge having 13 years of Experience in Teaching and 2 Yr. Research experience.
- ✓ Qualified for Lectureship with University Grant Commission, India, Dec-2012.
- ✓ Carrying out the managerial as well as administrative duties; Head of Department and Examination Section In-charge.
- ✓ Ensured ISO, NBA, NAAC accreditations and University/AICTE affiliations for the then institutions through constant monitoring and effective maintenance of documents and records.

## WORK EXPERIENCE :15 years

#### **Teaching Experience: 13 Yr.**

1	Position: Duration:	Associate Professor July 2019 - Present
	Institute: Roles & Responsibilities	<ul> <li>New Horizon College of Engineering, Bangalore</li> <li>Teaching Electronic Subjects Viz, Microprocessors, Signal Processing.</li> <li>Handling of Laboratories, Viz, Microprocessors, Electronic Devices &amp; Circuits.</li> <li>Guiding the Projects for UG &amp; PG students.</li> <li>NBA - Criterion IV head.</li> </ul>
Roles & Responsibilities- Teaching Electronic Subjects Viz - Handling of Laboratories, Viz, M Circuits. - Guiding the Projects for UG & P		<ul> <li>Jun 2015 – MAY 2017 (2 yrs.)</li> <li>Vemu Institute of Technology, Chittoor.</li> <li>Teaching Electronic Subjects Viz, Microprocessors, Signal Processing.</li> <li>Handling of Laboratories, Viz, Microprocessors, Electronic Devices &amp; Circuits.</li> <li>Guiding the Projects for UG &amp; PG students.</li> <li>Coordinator for University/AICTE Affiliation, ISO, NAAC</li> </ul>
3.	Position: Duration: Institute: Roles & Responsibilities	<ul> <li>Associate Professor</li> <li>Jul 2012 - May 2015 (2.8 yrs.)</li> <li>Chadalawada Ramanamma Engineering College, Tirupati.</li> <li>Teaching Electronic Subjects Viz, Microprocessors, Signal Processing, LICA</li> <li>Handling of laboratories, viz, microprocessors, EDC, LICA.</li> <li>Guiding The Projects for UG And PG Students.</li> <li>Head of The National Instruments - Excellence Centre.</li> <li>Examination section Incharge</li> <li>Coordinator for University/AICTE Affiliation, ISO, NAAC accreditation of the Institute</li> </ul>
4.	Position: Duration:	Lecturer* Nov 2010 - Jul 2012 (1.7 yrs.) https://www.linkedin.com/in/rajesh-gundlapalle-698b2b6

	Institute:	Jimma University, Ethiopia.		
	Roles &	- Teaching Electronic Subjects Viz., Instrumentation, Microprocessors,		
	Responsibilities	Signal Processing.		
		- Handling of laboratories, viz., microprocessors, electronic devices & circuits.		
		- Guiding Projects for UG And PG Students.		
5.	Position:	Associate Professor		
	Duration:	Jun 2010 - Nov 2010 (0.4 yrs.) [Holiday Job].		
	Institute:	Vaishnavi Institute of Technology for Women, Tirupati.		
	Roles &	- Teaching Electronic Subjects Viz., Microprocessors, Signal Processing		
	Responsibilities	- Handling of Laboratories viz., Microprocessors, Electronic Devices & Circuits.		
		- Guiding Projects for UG & PG Students.		
		- Examination Section Incharge, Department Incharge.		
		- Coordinator for University/AICTE Affiliation, ISO, NAAC accreditation		
		of the Institute.		
6.	Position:	Assistant Professor		
	Duration:	Dec 2006 - May 2008 (1.4 yrs.)		
	Company:	Siddharth Institute of Engineering and Technology, Puttur.		
	Roles &	- Teaching Electronic Subjects Viz., Embedded Systems, Electronic		
	Responsibilities Measurements and Instrumentation, Signal Processing.			
		- Handling of laboratories, viz., microprocessors, electronic devices & circuits.		
		- Guiding Projects for UG Students.		
		- Examination Section Incharge.		
7.	Position:	Lecturer		
	Duration:	Jun 2004 - Nov 2006 (2.4 yrs.)		
	Company:	Jaya Engineering College, Chennai		
	Roles &	- Teaching Electronic Subjects Viz., Distributed Control Systems,		
	Responsibilities	Communication Networks, Microprocessors, Signal Processing.		
		- Handling of Laboratories, Viz., Microprocessors, Electronic Devices & Circuits.		
		- Erection of Distributed Control Systems Laboratory.		
Resear	rch Experience: 2 Y	Yr.		
Ι	Position:	Junior Research Fellow		
	Duration:	Aug-2017 to April-2019		
	Title of the	PLC-HMI and ZIGBEE based WSN For Design and Development of		
	project :	Automatic Sprinkler for Multi Applications.		
	Location :	Centre for Industrial Automation, Vel Tech Research Park, Chennai.		
	Roles &	<ul> <li>Collaboration with PI</li> </ul>		
	Responsibilities	<ul> <li>Evaluate consistency of data from WSN module</li> </ul>		
		<ul> <li>Validate quality of data elements/data editing</li> </ul>		
		<ul> <li>PLC programming, as needed</li> </ul>		
		<ul> <li>Diagnose and solve PLC-HMI system/software problems, install applications software as related to research needs.</li> </ul>		

EDUCATION	DOCTORATE	POST GRADUATION	UNDER GRADUATION
Education Level:	Ph.D. in Engineering	Master of Engineering	Bachelor of Technology
Subject:	ECE - Image Processing	Applied Electronics	Electronics and Instrumentation Engineering
University:	Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai.	Sathyabama Institute of Science and Technology Chennai.	Sree Vidyanikethan Engineering College, Affiliated to J N T U Hyderabad.
Year	Oct 2020.	Apr 2010	Apr 2004

## **RESEARCH CONTRIBUTIONS**

## Patents Filed/Published: 05+02

- Novel System and Method of Hybrid Filtering Model for Speckle Removal in SAR Images, Dr. Rajesh Gundlapalle, Dr. A.B.Gurulakshmi, Dr. Dhivya M, Dr. Sanjeev Sharma New Horizon College of Engineering Patent No. E-2/22/2021-CHE Engineering and Technology, Filed 2021-02-22.
- Design and Analysis of Novel High Frequency Multiconductor Transmission Lines (HF-MTL), Dr. Gurulakshmi, Dr.M.Dhivya, Dr.Sanjeev Sharma, Dr. G Rajesh, New Horizon College of Engineering Patent No. E-2/3831/2020-CHE Engineering and Technology, Filed 2020-11-23.
- Novel Navigational Traffic Management System Using Smart Lane Dividers, Dr.M.Dhivya, Dr.A.B.Gurulakshmi, Dr.Sanjeev Sharma, Dr.Rajesh G New Horizon College of Engineering Patent No. E-2/3830/2020 Engineering and Technology, Filed 2020-11-23.
- Automated Air Cooler Ceiling Fan, Rajesh.G et. al. Patent No. 202041016342, Engineering and Technology, Filed 2020-04-15, Published 2020-05-25.
- IoT based People Counting and Alert System Using Dual Ultrasonic Sensor for Post Pandemic Safety, G Rajesh et. al. Patent No. 202041029561, Engineering and Technology, Filed 2020-07-11, Published 2020-07-31

## Journal Publication:

- Gurulakshmi A.B, Rajesh G et.al "Design and Analysis of Various Non-Radiating Transmission Line Structures on A High-Speed PCB's", Springer Series: Advances in Intelligent Systems and Computing 2021. (*in press*).
- G. Rajesh, B. Saroja, M. Dhivya and A. B. Gurulakshmi, "DB-Scan Algorithm based Colon Cancer Detection And Stratification Analysis," IEEE Xplore, 2020 Fourth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Palladam, India, 2020, pp. 644-648, doi: 10.1109/I-SMAC49090.2020.9243531.
- **3.** M Dhivya G Rajesh et. al. "Harris Hawks Optimization algorithm for lifetime maximization of Wireless Sensor Networks", The International journal of analytical and experimental modal analysis, ISSN NO:0886-9367, Volume XII, Issue VIII,pp 105 111, August/2020.
- 4. Dr. Boda Saroja, Rajesh Gundlapalle, "A New Approximate Adder with Block-based Carry Speculation for High- Speed Applications", International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN : 2456-3307, Volume 4, Issue 11, pp.73-78, September-2020.

- **5.** Rajesh Gundlapalle, Sankarappa, Dr. Boda Saroja, "Rapid Multiplier Architecture for Area and Power Optimization", International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN : 2456-3307, Volume 4, Issue 11, pp.79-83, September-2020.
- **6.** G. Rajesh and A. Selwin Mich Priyadharson, "Liver Cancer Detection and Classification based on Optimum Hierarchical Feature Fusion with PeSOA and PNN Classifier", Biomedical Research, Vol 29 No 1, pp 22-32. (SCIE Indexed). 10.4066/biomedicalresearch.29-16-1320
- G. Rajesh and A. Selwin Mich Priyadharson, "Improved Despeckle Filtering Technique for Liver Cirrhosis US Images", International Journal of Engineering & Technology, Vol 7 No 2.20, pp 267-271. (SCOPUS Indexed).
- G. Rajesh and A. Selwin Mich Priyadharson, "Abnormality Detection and Classification of Hepatic US Images", Jour of Adv Research in Dynamical & Control Systems, Vol 10 No 5, pp 181-186. (SCOPUS Indexed).
- 9. G. Rajesh and A. Selwin Mich Priyadharson, "Survey on Identification Tools for Hepatocellular Carcinoma- A Review", Annual Research & Review in Biology, Vol 23 No 2, pp 1-25. (UGC Indexed)
- 10. G. Rajesh, Selwin Mich Priyadharson, A., Vinson Joshua, S, "PLC-HMI and ANN based Automatic Drip for Effective Utilization of Water, Nutrients And Pesticides", Jour of Adv Research in Dynamical & Control Systems", Vol 10 No 7 pp 27-34. (SCOPUS Indexed) Ref: https://scholar.google.co.in/citations?hl=en&user=-YaILjwAAAAJ

## CONFERENCES

- 1. G. Rajesh, Sanjeev Sharma, S Ramalakshmi, Bhaskar S V, Paper Titled "Model-Based Estimation of Irrigation Provisions and Timing During Off-Seasons", Conference on Recent Advances in Technology & Engineering Aug 2020, Vemu IT, Chittoor.
- 2. G. Rajesh, Thirukkumaran R, Dhivya M, Gurulakshmi A.B, Paper Titled "Precision Irrigation System based on IoT", Conference on Recent Advances in Technology & Engineering Aug 2020, Vemu IT, Chittoor.
- Rajesh G, Ms. Gagana M, Gowri R., Sneha Priya, Harshita, Mounika, Paper Titled "Battery Management System Using Texas Instruments Launch Pad Boards", National Conference On Control, Computation and Communications NCCCC – 2020.
- 4. Rajesh G, Saroja B, Paper Titled "Sarcomata Disease Detection and Stratification Based on Contrast Limited Versatile Histogram Balance", International Conference on Innovative Research in Engineering, Management and Sciences ICIREMS-2019
- G. Rajesh, Dr. A. Selwin Mich Priyadharson S. Vinson Joshua, Paper titled, "Exclusively Automated Agricultural Engineering System using PLC-HMI and ZigBee based WSN". IEEE International Conference on Technological Innovations in ICT for Agriculture and Rural Development (TIAR 2018).
- 6. G Rajesh, Dr A Selwin Priyadarshon, Paper Titled "Liver Tumour Identification by MR Imaging for Prevention of its Risks and Tumour Theraphy: A Survey", NCETESI-2k17, CREC, Tirupati.
- G Rajesh, Dr A Selwin Priyadarshon, Paper Titled "Liver Cancer Detection and Classification Based on Dynamic Vector Warping with Optimum Hierarchical Feature Fusion", Racee-2k16-NIT-Warangal. (Awarded as Best Presented Research Paper).
- 8. G Rajesh, Dr A Selwin Priyadarshon, Paper titled "Liver Cancer Detection and Classification Based on Dynamic Vector Warping with Optimum Hierarchical Feature Fusion", ICMCE-2016, VIT, Chennai.

- 9. K. Siva Prasad, G. Rajesh, Paper titled "Implementation of Multi-Bit flip-flop for Power Reduction in CMOS Technologies", IJIRCCE, 2014.
- 10. G Rajesh, N Swetha Priyanka, Paper titled, "Hara Q-Routing Table For On Chip Congestion Control". ICAET'2013, ISBN: 9788190898065.
- 11. G Rajesh, B. Saroja, Paper titled, "Sparse Sampling Technique for High Frequency Receivers Applications". International Conference on Innovation in Electronics & Communication Engineering. July'2012.
- 12. G Rajesh, Sailaja, B Saroja, Paper titled "Detection of Object using RF and GSM ". ICRACS-2K12.
- G Rajesh, V Anandachari, Paper titled "REDTACTON New HAN using Near-body Electric field Communications Technology and Its Applications", First International Conference on Information Communications Engineering and Technology, Mekelle Institute of Technology, Ethiopia.
- 14. G.Srinivasulu, G.Rajesh, Paper Titled "Optimized Design And Implementation of IEEE-754 Floating Point Processor", NLTSETE&S- 2k15- March
- 15. G Rajesh, N Swetha Priyanka. Paper Title "Haraq- Routing On-Chip Networks". National Conference in Recent Trends in Electronics & Communication Engg. March'2013
- G Rajesh, B Saroja, Paper Title, "A Novel Approach to Minutiae Based Partial Finger Print Recognition System". ELIXIR-2K12
- 17. G Rajesh, B Saroja, Paper Title, "Redtaction- Revolutionary Near Body Electrical Field Communication Technology". NCACEE'11
- 18. G Rajesh, B Saroja, Paper Title, "Automated Voice Based Home Navigation System for the Elderly and the Physically Challenged" Brilliant Exploration'12
- 19. G Rajesh, B Saroja, Paper Title, "Range Independent Methods for Secured Localization in Wireless Sensor Networks". National Conferences ECEAADD'10

#### **RESEARCH PROPOSALS SUBMITTED**

- 1. DST : 01 [CRG] + 01 [SERB]
- 2. VGST\_RGS/F 01
- 3. AICTE STTP 01

#### **OTHER INFORMATION**

- 1. MOOC/NPTEL COURSES: 05
- 2. Workshops/STTPS/FDPs :10 + 4 + 12
- 3. As Resource Person 05

#### **OTHER CERTIFICATIONS**

- 1. Certified in Embedded Systems Design by Advanced Training Institute EPI, Hyderabad.
- <sup>2.</sup> Certified in PLC Programming & Applications by Advanced Training Institute EPI, Hyderabad.
- 3. Certified in Process Instrumentation & Control by Advanced Training Institute EPI, Hyderabad.

I do hereby declare that the above statements mentioned in my resume are true and correct to the best of my knowledge and belief.

Place: Date:

## RAJESH G