Bio Data

Dr. Y. RAMAKRISHNA

Department: Electronics and Communication Engineering Seshadri Rao Gudlavalleru Engineering College Gudlavalleru, Krishna Dist., A.P. – 521 356 Mobile: +91-9885371552 E-Mail: yrk.gec@gmail.com

Residential Address

D. No. 1- 151, Behind Vijayalakshmi Theatre, Kankipadu Post, Krishna Dist., Pin - 521151

Academic Qualifications

S. No	Name of the Degree	University	Percentage of Marks/Grade	Specialization	Year of Pass
1	Ph. D.	J. N. T. University Kakinada		Smart Antennas	2015
2	M. Tech.	Acharya Nagarjuna University, Guntur	77.00	Microwave Engineering	2005
3	B.E.	University of Madras, Chennai	70.04	ECE	2002
4	10+2	Board of Intermediate Education, A.P.	84.10	MPC	1998
5	S.S.C	Board of Secondary Education, A.P.	81.00		1996

Professional Body Membership

S. No	Name of the Professional body	Membership Number
1	IETE	M-234488
2	ISTE	LM-65873
3	Indian Society of Systems for Science and Engineering (ISSE)	LM-03775
4	Society for Learning Technologies	LM472



Professional Experience

			Working Period	
S. No	Designation	Institution Name	From	То
1	Professor & Mentor (AS&A)	SR Gudlavalleru Engineering College, Gudlavalleru	01.12.2023	Till on date
2	Professor & Head	SR Gudlavalleru Engineering College, Gudlavalleru	01.12.2020	30.11.2023
3	Professor	SR Gudlavalleru Engineering College, Gudlavalleru	16.11.2016	30.11.2020
4	Associate Professor	PVP Siddhartha Institute of Technology, Vijayawada	01.01.2012	15.11.2016
5	Sr. Assistant Professor	PVP Siddhartha Institute of Technology, Vijayawada	01.03.2009	31.12.2011
6	Assistant Professor	PVP Siddhartha Institute of Technology, Vijayawada	01.07.2004	28.02.2009

Papers Published in Journals (No. : 26)

- Y. Rama Krishna et al., "Design of Compact True Wireless Stereo (TWS) Antenna in Earphones for Wearable Communication Applications", Engineering Research Express, Vol. 7, No. 1, January 2025, ISSN: 2631-8695, <u>https://doi.org/10.1088/2631-8695/ada873</u>. *Scopus and WoS Indexed.*
- Y. Rama Krishna et al., "Automated Detection and Classification of Retinal Lesions Using Image Processing Techniques", *Journal of Image Processing and Artificial Intelligence*, Vol. 10, No. 2, pp. 1-13. 2024, e-ISSN: 2581-3803, DOI: <u>https://doi.org/10.46610/</u> JOIPAI.2024.v10i02.001.
- 3. Y. Rama Krishna, et al., "Design of Circular and Rectangular Patch Antennas Using Teflon and Rogers Substrates for 5G Applications at 25 GHz", Journal of Advance Electrical Engineering and Devices, Vol. 2, No. 2, pp. 9-18, 2024, e-ISSN: 2583-9225, DOI: https://doi.org/10.46610/JAEED.2024.v02i02.002
- 4. Yarlagadda Ramakrishna, et al., "Characteristic Mode Analysis for Microstrip Fed Conformal Metasurface Multiband Antenna", Journal of Progress In Electromagnetics Research C, Vol. 141, No. 1, January 2024, pp. 1-11, doi: 10.2528/PIERC23122502, https://www.jpier.org/ac_api/download.php?id=23122502. SCOPUS, WoS.
- 5. Yarlagadda Ramakrishna, et al., "Synthesis of Elliptical Antenna Array using Hybrid SSWOA Algorithm.", The Applied Computational Electromagnetics Society Journal (ACES), 2023, doi:10.13052/2023.ACES.J. 380503. SCI
- Yarlagadda Ramakrishna, et al., "A Circular Split Ring Resonator Absorber with Graphene Material for Terahertz Communication Applications", Journal of Progress In Electromagnetics Research M, Vol. 117, No. 1, June 2023, pp. 119-128, doi:10.2528/PIERM23042105, http://www.jpier.org/PIERM/pier.php?paper=23042105.
 SCOPUS, WoS.

- Yarlagadda Ramakrishna, et al., "Automatic Water Supply and Monitoring using IoT", Journal of Instrumentation and Innovation Sciences, Vol. 8, No. 1, April 2023, pp. 27-33, e-ISSN:2456-9860, https://doi.org/10.46610/JIIS.2023.v08i01.004.
- Yarlagadda Ramakrishna and Bhavanam Sree Poojitha, "Detection of Malaria Parasites in Blood Samples using Image Processing Techniques", Journal of Image Processing and Artificial Intelligence, Vol. 9, No. 1, April 2023, pp. 32-37, e-ISSN: 2581-3803, <u>https://doi.org/10.46610/JOIPAI.2023.v09i01.005</u>
- Y. Ramakrishna et al., "Machine Learning based approach for Smart Agricultural Manlevelment", European Chemical Bulletin, Vol. 12, No. 5, March 2023, pp. 661-668, ISSN 2063-5346, DOI: <u>10.31838/ecb/2023.12.s3.0762023.18/04/2023</u>. SCOPUS
- Y. Ramakrishna, P. Akhil, Y. Vikhitha, T. Priyanka and V. Rohit, "Bitcoin Price Prediction By Twitter Sentiment Analysis", Journal of Interdisciplinary Cycle Research, pp. 1212-1221, Vol. 14, No. 4, April 2022, e-ISSN: 0022-1945.
- Y. Ramakrishna, V. Ratna Kumari, "Remote Monitoring of Perishable Goods using IoT", Journal of Instrumentation and Innovation Sciences, pp. 22-26, Vol. 7, No. 1, January 2022, e-ISSN: 2456-9860.
- 12. Y. Ramakrishna, V. Ratna Kumari, "Covid-19 Prediction Using Machine Learning Algorithms", Journal of Instrumentation and Innovation Sciences, pp. 27-33, Vol. 6, No. 2, August 2021, ISSN: 2456-9860.
- V. Ratna Kumari, Y. Ramakrishna, Kiran Kumar Gangavarapu and Ch. Amarnatha Sarma, "Human Acoustic Voice Controlled Robot Using LabView and Arduino", Journal of Green Engineering, pp. 2982-2997, Vol. 11, No. 3, March 2021, ISSN: 1904-4720 (Print); 2245-4586 (Online). SCOPUS
- Y. Ramakrishna, V. Sriram Adithya, S. Sri Sowmya, R.Vamsi Krishna, S.G.S.Raghavendra, "Vehicle Speed Monitoring", International Journal of Scientific Research in Engineering and Management, pp. 1-4, Vol. 4, No. 9, September 2020, ISSN: 2582-3930.
- 15. Y Rama Krishna, L. Krishna Karthisha, Reema Mathew, Shubhashasi Sahoo, "ContikiMAC for Wireless Sensor Network Monitoring Application", IOSR Journal of Electronics and Communication Engineering, pp. 1-6, Vol. 15, No. 5, September 2020, *e-ISSN: 2278-2834,p- ISSN: 2278-8735.*
- 16. Y. Ramakrishna, D. Leelavathi, V.S. Sreenivas and S. Sai Kishore, "Intruder Alert and Security System," International Journal of Research and Analytical Reviews (IJRAR), pp. 469-472, Vol. 6, No. 1, March 2019, ISSN: 2348-1269.
- Y. Ramakrishna, R. Siri Himaja, G. Rohit Singh, T. Kasi Viswanath and A. Kavitha, "Boat Overloading Indicator," International Journal of Research and Analytical Reviews (IJRAR), pp. 333-337, Vol. 6, No. 1, March 2019, ISSN: 2348-1269.
- 18. Y. Ramakrishna, V. Ratna Kumari and P. V. Subbaiah, "A Novel Adaptive Beamforming Algorithm for smart antennas," Book Chapter in Advances in Intelligent Systems and Computing Book Series (AISS, Vol. 898), Springer Singapore, pp. 589-597. doi: <u>https://doi.org/10.1007/978-981-13-3393-4_60/</u> ISBN: 978-981-13-3392-7, Publisher: Springer Singapore.

- 19. G. Kiarn Sowmya and Y. Ramakrishna, "Development of Local Ternary Patterns for Content Based Image Retrieval", International Journal of Electronics and Communication Engineering, Vol. 11, No. 1, 2018, pp. 23 - 30. ISSN 0974-2166.
- V. S. Sreekanth, Y. Rama Krishna and A. V. V. Prasad, "Simulation and Implementation of Convolution Encoder and Viterbi Decoder", International Journal of Scientific Engineering and Research (IJSER), Volume 4 Issue 10, October 2016, pp.132 – 137, http://www.ijser.in/archives/v4i10/v4i10.php.
- 21. P. Koteswara Rao, Y. Ramakrishna and PV Subbaiah, "Nonlinear Gradient Descent Algorithm for Smart Antennas", International Journal of innovative Research in Computer Communication Engineering, Vol. 3, No. 9, September 2015, pp. 8779 - 8785. DOI: 10.15680/IJIRCCE.2015.0309146., ISSN: 2320-9798 (Print), 2320-9801 (Online).
- 22. Y. Ramakrishna, P.V. Subbaiah and B. Prabhakara Rao, "A Novel Hybrid Adaptive Algorithm for Improvement of Mean Square Error Convergence", International Journal of Systems, Control and Communications, Vol. 6, No. 1, June 2014, pp. 59 - 68. DOI: 10.1504/IJSCC.2014.062804. Inderscience Publishers, ISSN: 1755-9340 (Print), 1755-9359 (Online). SCOPUS
- 23. Sadiqua Khan, Y Ramakrishna, Dr P Rajesh Kumar, "Fast Independent Component Analysis Algorithm for Blind separation of Non-Stationary Audio Signal", International Journal of Engineering Research and Applications, Vol. 3, No. 6, December 2013, pp 1367-1371. ISSN: 2248-9622.
- 24. Y. Ramakrishna, P.V. Subbaiah and B. Prabhakara Rao, "A Novel Approach for Hybrid of Adaptive Amplitude Non-linear Gradient Decent (AANGD) and Complex Least Mean Square (CLMS) Algorithms for Smart Antennas", International Journal of Wireless and Mobile Networks, Vol. 5, No. 1, February 2013, pp. 119-126, DOI:10.5121/ ijwmn.2013.5110, ISSN: 0975-3834 (online), 0975-4679 (print).
- 25. Y. Ramakrishna, P.V. Subbaiah and B. Prabhakara Rao, "Adaptive Nonlinear Gradient Decent (ANGD) Algorithm for Smart Antennas", International Journal of Mobile Network Communications and Telematics, Vol. 2, No. 6, December 2012, pp. 11-19, DOI :10.5121 / ijmnct. 2012. 2602, ISSN: 1839-5678.
- 26. Y. Ramakrishna, P.V. Subbaiah and V. Ratnakumari, "Analysis of Statistical Path Loss Models for Mobile Communications", International Journal of Computer and Network Security, Vol. 2, No. 10, October 2010, pp. 13-17. ISSN: 2076-2739.

Papers Published in Conferences No. : 07

- Y. Ramakrishna, Ratna Kumari V., P.V. Subbaiah "A Novel Adaptive Beamforming Algorithm for Smart Antennas". Proceedings of Soft Computing and Signal Processing. Advances in Intelligent Systems and Computing, vol. 898. Springer, Singapore, 2019. <u>https://doi.org/10.1007/978-981-13-3393-4_60</u>, pp. 589-597. SCOPUS
- Y. Ramakrishna, V. Ratna Kumari and P. V. Subbaiah, "Hybrid adaptive beamforming algorithms for smart antennas," 2017 IEEE 6th International Conference on Computer Applications in Electrical Engineering-Recent Advances (CERA), IIT Roorkee, Oct. 2017, pp. 117-122. doi: 10.1109/CERA. 2017. 8343312. SCOPUS

- 3. Y. Ramakrishna, P.V. Subbaiah and B. Prabhakara Rao, "Heuristic Based Adaptive Step Size CLMS Algorithms for Smart Antennas", Proceedings of the Third International Conference on Computer Science, Engineering and Applications (ICCSEA 2013), New Delhi, May 2013, pp. 313-320. DOI: 10.5121/ csit.2013.3532, ISSN: 2231-5403.
- Y. Ramakrishna, P.V. Subbaiah and B. Prabhakara Rao, "A Hybrid Model of CLMS and ACLMS Algorithms for Smart Antennas", Proceedings of the Fourth International Conference on Networks and Communications (NETCOM 2012), Chennai, December, 2012, Springer Lecture Notes in Electrical Engineering 131, pp. 93 – 104, DOI:10.1007/978-1-4614-6154-8 10. ISSN: 1876-1100 (print), ISSN: 1876 -1119 (electronic).
- Y. Ramakrishna, PESN Krishna Prasad, P.V. Subbaiah and B. Prabhakara Rao, "A Performance Analysis of CLMS and Augmented CLMS Algorithms for Smart Antennas", Proceedings of International Workshop on Computer Networks and Communications (CoNeCo 2012), Coimbatore, October 2012, pp. 9 – 19, DOI:10.5121/csit.2012.2402, ISSN: 2231-5403 (Online).
- 6. Y. Ramakrishna, P.V. Subbaiah and V. Ratnakumari, "Smart Antenna Strategies for Advanced Wireless Communication Systems", Proceedings of the International Conference on Emerging Trends in Signal Processing and VLSI Design (SPVL-2010), Hyderabad, June 2010.
- Y. Rama Krishna, "A New Robust Algorithm for Speech End Point Detection", Proceedings of International Conference on Bio-Medical Electronics and Telecommunications (BET-04), Visakhapatnam, 2004, pp. 255-259.

Patents Published: 02

- 1. Title: Electromagnetic Separating Means of a Smart Trolley for Multiple Compartments and Method Thereof; Application Number: 202241061751A; Date of Filing: 30.10.2022; Date of Publication: 09.12.2022.
- 2. Title: Magnetic Resonance Coupling Wireless Power Transfer Unit for Implantable Biomedical Devices; Application Number: 202041031917 A; Date of Filing: 25.07.2020; Date of Publication: 21.08.2020.

LIST OF WORKSHOPS ORGANIZED: 06

- Organized Two Week Faculty Development programme on AI for communication and Signal Processing Applications during 03.02.2025 to 13.02.2025 in association with E&ICT Academy NIT Warangal, sponsored by Ministry of Electronics and Information Technology (MeitY), GoI, with a grant of Rs. 2.15 lakhs. Eminent Professors from IITs, NITs and Central Universities delivered lectures in the FDP.
- Organized three induction programmes on Millimeter Wave frequencies during November 2020 to August 2021 with AICTE-ISTE grant of Rs. 3.00 lakhs. Eminent Professors from IITs, NITs, IIITs delivered lectures in the workshops.

- Organized one day workshop on Advanced Image Processing Techniques at Gudlavalleru Engineering College on 23.09.2017 in association with Indian National Science Academy (INSA). Resource persons: Padmashri B.L. Deekshatulu, Former Director NRSC and Dr. Challa Subrahmanya Sastry, IIT Hyderabad.
- Organized a guest lecture on Modern Antennas and their applications by Prof. NVSN Sarma, NITW on 24.03.2018.

NPTEL Courses Completed: 01

Completed a 12 week SWAYAM - NPTEL online certification course titled "Problem Solving through Programming in C", offered by Prof. Anupam Basu, Dept. of CSE, IIT Kgp. during July – October 2024 with a consolidated score of 63% (ELITE). No. of Credits 3 or 4. Roll No. NPTEL24CS123S955700993.

FDPs/Workshops /Conferences /Seminars Attended No. : 33

- 1. Attended Two day **Systems Engineering Summit** at SRM University AP, Conducted by Efftronics Pvt. Ltd., in association with ICOSA during 23 24, January 2025.
- 2. 12 Week NPTEL-AICTE-Faculty Development Programme in the course "Problem Solving through Programming in C" during July October 2024 with a consolidated score of 63%.
- 3. Two Week FDP on "Transforming Education: Integrating OBE and NEP 2020" from 22 July 2024 to 02 August 2024, organized by the department of ECE, CVR College of Engineering, Hyderabad, Telnagana.
- 4. Five day online FDP on "Trends in Communication" organized by Sir C R Reddy College of Engineering, Eluru during 26.05.2020 to 30.05.2020.
- 5. Two week FDP on "Python Programming" organized by Andhra Pradesh State Skill Development Corporation (APSSDC) during 18.05.2020 to 30.05.2020.
- 6. Govt. of India sponsored One week FDP on "Machine Learning Applications in Signal processing" organized by E&ICT Academy, NITW at GEC Gudlavalleru during 04.02.2019 to 09.02.2019.
- 7. Attended two day training programme on Design and Development of Digital Circuits using VLSI Tools organized by Dept. of ECE, GEC during 6th and 7th December 2018.
- 8. Attended One week FDP on Communications and Signal processing organized by ECE, GEC during 29.10.2018 to 03.11.2018.
- Attended International conference of Soft Computing and Signal processing during 22.06.2018 to 23.06.2018 at Mallareddy college of Engineering and Technology, Hyderabad.
- 10. Attended a workshop on NBA-SAR filling and preparedness for assessment during 23.10.2017 to 25.10.2017 at ESCI, Hyderabad.
- 11. Attended international conference on Computer Applications in Electrical Engineering Recent Advances at IIT Roorkey during 5th to 7th October 2017.

- 12. Seminar on MATLAB and SIMULINK for Engineering Education conducted by MathWorks at Vijayawada on 05.02.2016
- 13. Faculty Development programme on Professional Core of IT at PVP Siddhartha Institute of Technology from 21.01.2016 to 23.01.2016
- 14. Three day workshop on Overview on Latest Telecom Technologies by BSNL Krishna SSA at Vijayawada from 05.03.2015 to 07.03.2015
- 15. One day workshop on Turnitin An Anti Plagiarism Software conducted by Directorate of Research & Development, JNT University Kakinada on 24.01.2014
- 16. Two week ISTE workshop on Signals and Systems conducted by IIT Kahargapur under National Mission on Education through ICT (MHRD) at PVP Siddhartha Institute of Technology from 02.01.201 to 12.01.2014
- 17. Third international conference on Computer Science, Engineering & Applications conducted during 24.05.2013 to 26.05.2013 at New Delhi
- Three day training programme on Advanced Microwave and Communication Engineering Equipment conducted by Amitec Electronics Ltd. PVP Siddhartha Institute of Technology during 23.07.2013 to 25.07.2013
- 19. Fourth International Conference on Networks and Communications conducted during 22.12.2012 to 24.12.2012 at Chennai
- 20. One day interactive workshop on Natural Language Processing conducted by Department of Computer Applications, PVP Siddhartha Institute of Technology on 08.12.2012
- 21. Fourth International Workshop on Computer Networks and Communications conducted during 26.10.2012 to 28.10.2012 at Coimbatore
- 22. Workshop on Modern Antennas: Simulation and Applications organized by Dept. of ECE of NIT Warangal during 17.02.2012 to 19.02.2012
- 23. One day workshop on Outcome Based Engineering Education conducted by Academy of Faculty Development, Vignan University on 28.01.2012
- 24. AICTE sponsored National level seminar on Smart Antenna Technologies for Future Wireless Systems: Trends and Challenges organized by VR Siddhartha Engineering College during 06.08.2011 to 07.08.2011
- 25. Two day workshop on Labview conducted by ECE department of PVP Siddhartha Institute of Technology during 27.10.2010 to 28.10.2010
- 26. National workshop on Quality of Research and Young Scientist Sensitization conducted by JNT University Kakinada on 23.10.2010
- International conference on Emerging Trends in Signal Processing and VLSI Design organized by Guru Nanak Engineering College, Hyderabad during 11.06.2010 to 13.06.2010
- 28. Two workshop on MATLAB and Its Applications conducted by PVP Siddhartha Institute of Technology during 29.07.2009 to 30.07.2009

- 29. Two week AICTE sponsored staff development programme on Signal Processing and Wireless Communications organized by Dept. of ECE, VR Siddhartha Engineering College during 13.07.2009 to 25.07.2009
- 30. Faculty training programme for effective communication conducted by S & H department of PVP Siddhartha Institute of Technology during 04.05.2009 to 09.05.2009
- 31. Two day national workshop on Advances in Signal and Image Processing organized by JNT University Kakinada during 20.10.2008 to 21.10.2008
- 32. One day seminar on VLSI Design conducted by ECE department of PVP Siddhartha Institute of Technology on 09.01.2007
- 33. One day Faculty Development Programme on Brain Train Effective Teaching organized by Training and Placement department of PVP Siddhartha Institute of Technology on 07.01.2007

Certifications/Training Programs Attended No. : 02

- 1. One week AICTE recognized short term course on Introduction to Embedded Systems conducted by NITTTR Chandigarh at PVP Siddhartha Institute of Technology from 08.02.2016 to 12.02.2016.
- 2. Five Day short term training programme on Practical RF Antenna Design organized by Dept. of ECE under Electronics & ICT Academy of NIT Warangal at NIT Warangal during 06.07.2015 to 10.07.2016.

Guest Lectures Delivered No. : 01

Delivered a guest lecture on "Smart Antennas for Mobile Communications" during faculty development programme organized by Chalapathi Institute of Engineering and Technology on 05.10.2016.

Other Achievements:

- Editor in Chief, Journal of Instrumentation and Innovation Sciences
- Editorial Board member of Journal of Digital Circuitry Innovations in Electrical Drives
- Members Board of Studies, Department of ECE, Krishna University, Machilipatnam.

Subjects Handled

Under Graduation

- Transmission Lines and Wave Guides
- Antennas and Wave Propagation
- Microwave Engineering
- Cellular and Mobile Communications
- Analog and Digital Communications
- Electronic Measurements and Instrumentation
- Satellite Communications

- Optical Communications
- Telecommunication Switching Systems
- Data Communications
- Radar Engineering
- EM Waves and Transmission Lines
- Digital Image Processing

Post Graduation

- Microstrip Components and Microstrip Analysis
- EMI /EMC

Labs Handled

Under Graduation

- Microwave and Optical Communications Lab
- Electronic Devices and Circuits Lab
- Analog Communications Lab

Other Responsibilities

Department Level	: Mentor (Academic Strengthening and Advancement)
Institute Level	: NBA Coordinator

Projects Guided:

Under Graduation: 32

Post-Graduation: 07

Ph.D. Scholars: Guiding Two PhD. Scholars under JNT University Kakinada.

Curriculum Design and Development

- 1. Antennas and Wave Propagation
- 2. Smart Antennas
- 3. Microwave and Optical Communications
- 4. Transmission Lines and Waveguides

Declaration

I hereby declare that all the above furnished information is true to the best of my knowledge.

Date: 05.02.2025

Signature

Place: Gudlavalleru

(Dr. Y. RAMAKRISHNA)