# **FACULTY PROFILE**

# Name of the faculty: RAMBABU CHEVALA

Department: Electronics and Communication Engineering
College: Seshadri Rao Gudlavalleru Engineering College

Phone No: 08674 – 273737, 273888 (O)

Mobile: +91-9490724428

E-Mail: rambabuec41@gmail.com

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Thullur Post and Mandal, Guntut District. AP-522237

## **Academic Qualifications**

S. No.	Name of the Degree	College/ University	Percentage of Marks	Specialization	Month and Year of Pass
1.	Ph.D	JNTUK, Kakinada	-	Wireless Sensor Networks	April 2023
2.	M.Tech	Gudlavalleru Engineering College, JNTU Hyderabad	70.8	Digital Electronics and Communication Systems	July 2008
3.	B.Tech	V.R. Siddhartha Engineering College, Nagarjuna University	69.8	Electronics and Communications	April 2003
4.	Intermediate	AP Residential Junior College, Venkatagiri	81	MPC	April 1999
5.	S.S.C	AP Residential School, Tadikonda	84.66	-	April 1997



**Professional Experience** 

S.No.	Designation	Institution Name	Working Period	
		institution Name	From	To
1	Associate Professor	Seshadri Rao Gudlavalleru	01 07 2022	T:11 do40
		Engineering College, Gudlavalleru	01-07-2023	Till date
2	Senior Grade Assistant Professor	Gudlavalleru Engineering College,	01 07 2014	20.06.2022
		Gudlavalleru	01-07-2014	30-06-2023
3	Assistant Professor	Gudlavalleru Engineering College,	01 10 2007 20 06 201	
		Gudlavalleru	01-10-2007	30-06-2014

**Professional Body Membership** 

S. No.	Name of the Professional body	Membership Number
1.	The Institute of Engineers (India)	M-150338-8

## Papers Published in Journals No.: 21

- 1. Md.Nazma Sultana, K.Sai Kiran, K. Karthik, Ch.Rambabu, "EEG signal based mental stress detection", International Research Journal of modernization in Engineering Technology and Science (IRJMETS), Vol.5, issue 3, March 2023, pp. 1897-1901.
- Ch. Rambabu, V.V.K.D.V.Prasad and K. Satya Prasad, "A New version of energy efficient optimization protocol using ICMA-PSOGA algorithm in wireless sensor networks", Springer Nature Computer Science Journal, vol.3, issue 353, June 2022, pp.1-12. (SCOPUS)
- 3. Ch.Rambabu, G.Dilip Kumar, G.Amulya, K.N.Suresh Kumar, P.Kiranmai, "RFID based mobile charging system", International Journal of Scientific Research in Engineering and Management (IJSREM),vol.4,issuep,Sep. 2020,pp.1-5.
- Ch Rambabu, V.V.K.D.V.Prasad, K.Satya Prasad, "Multipath Cluster-based Hybrid MAC Protocol for Wireless Sensor Networks", International Journal of Wireless and Microwave Technologies(IJWMT), Vol.10, No.1, Feb 2020 pp. 1-16.(h-5 Index)
- Ch. Rambabu, V.V.K.D.V. Prasad, K. Satya Prasad, "A PSO-TDMA based Energy Efficient Unequal and Fault Tolerant Clustering Protocol for Wireless Sensor Networks". Jour of Adv Research in Dynamical and Control Systems(JARDCS), Vol. 11, No. 11, 2019, pp.8-17,ISSN 1943-023X 17. (SCOPUS)
- 6. Ch. Rambabu, V.V.K.D.V. Prasad, K. Satya Prasad, "State of the Art Energy Efficient Optimization Algorithms in Wireless Sensor Networks", International Journal of

- Engineering and Advanced Technology (IJEAT), ISSN: 2249 8958, Vol.8, Issue 6S2, August 2019, pp.870-875. (SCOPUS)
- 7. Ch. Rambabu, V.V.K.D.V. Prasad, K. Satya Prasad, "A Visiting Center based Energy Efficient Data Collection Method for WSN'; International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Vol. 8, Issue 3, September 2019, pp.5152-5158. (SCOPUS)
- 8. Ch. Rambabu, V.V.K.D.V. Prasad, K. Satya Prasad, "A Research on Energy Efficient Cluster Routing for the Wireless Sensor Networks", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Vol.8, Issue-6S4, April 2019, pp.1344-1347. (SCOPUS)
- 9. Ch. Rambabu , V.V.K.D.V. Prasad , K. Satya Prasad, "Energy Efficient Backend Cluster Head and Fault Tolerance model for Wireless Sensor Networks', Journal of Mechanics of Continua and Mathematical Sciences (JMCMS), ISSN : 2454 -7190, Vol.14, issue 3, May-June 2019, pp. 393-406.
- 10. K.Mounika, Ch.Rambabu, V.V.K.D.V.Prasad, "Improving the Network Life Time of Wireless Sensor Network using MAODV Protocol with LEACH Algorithm", International Journal of Computer Sciences And Engineering (JCSE), E-ISSN:2347-2693, Vol.6, Issue 6, June2018,pp.534-538.
- 11. J.Ajay Nayak, Ch.Rambabu, V.V.K.D.V.Prasad, "Improving the Network Life Time of Wireless Sensor Network using EEEMR Protocol with Clustering Algorithm", International Journal of Electronics, Electrical and Computational System (IJEECS) ISSN:2348-117X, Vol. 6, Issue 6, June 2017, pp.342-346
- 12. K.Surendhra, Ch.Rambabu, V.V.K.D.V.Prasad, "An Efficient Energy Utilization Using Routing Protocols In Heterogeneous Wireless Sensor Networks", International Advanced Research Journal in Science, Engineering and Technology (IARJSE) ISSN: 2393-8021, Vol. 3, Issue 8, Aug. 2016, pp. 206-210.
- 13. P.J.P.R.Durgaprasad, Ch.Rambabu "Performance Analysis of Precoding Design for Space Time Block Coding System in MIMO", International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE) ISSN: 2277–128X, Vol. 6, Issue 1, Jan. 2016, pp. 221-225.

- 14. Navyasree Veeramallu and Ch.Rambabu, "Energy Efficient and Certificate Revocation Technique for Mobile Ad Hoc Networks", International Journal of Computer Applications (IJCA) ISSN: 0975-8887, Vol. 106, Issue 1, Nov. 2014, pp. 32-36.
- 15. N.Ritishree and Ch.Rambabu, "Efficient Coded OFDM Modem using FPGA", International Journal of Computer Applications (IJCA) ISSN: 0975-8887, Vol. 105, Issue 7, Nov. 2014, pp. 26-29.
- 16. K.L.N.Santosh and Ch.Rambabu, "A Novel Multimodal Biometric Approach of Face and Ear Recognition using DWT & FFT Algorithms", International Journal of Scientific Engineering and Technology Research (IJSETR) ISSN:2319-8885, Vol. 2, Issue 17, Nov. 2013, pp. 1973-1977.
- 17. M.V.Punnaiah and Ch.Rambabu, "Asynchronous Classification of Digital Amplitude Phase Modulated Signals in Rayleigh Fading Channel", International Journal of Scientific Engineering and Technology Research (IJSETR) ISSN:2319-8885, Vol. 2, Issue 13, Oct. 2013, pp. 1430-1434.
- 18. Sivakumari .V and Ch.Rambabu, "Secure and Robust Digital Watermarking based on SVD Technique", International Journal of Scientific Engineering and Technology Research (IJSETR) ISSN: 2319-8885, Vol. 2, Issue 9, Sep. 2013, pp. 883-888.
- 19. Y.Sruthi and Ch.Rambabu, "A New Algorithm for High Density Impulse Noise Reduction using Unsymmetric Trimmed Median Filter", International Journal of Electronics and Communication Engineering & Technology (IJECET) ISSN: 0976-6472, Vol.3, Issue2, July-Sep.2012, pp. 278-285.
- 20. R.Sarojini and Ch.Rambabu, "Design and Implementation of DSSS-CDMA Transmitter and Receiver for Reconfigurable links using FPGA", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Vol.1, Issue3, August 2012, pp.169-174.
- 21. RBT Sundari, Mallikharjuna Reddy.D and Ch.Rambabu, "Design and Simulation of a CDMA Based Bidectional Data link System for Airborne Applications", International Journal of Engineering Research& Applications. (IJERA) ISSN: 2248-9622, Vol.1, Issue3, Oct. 2011, pp. 923-928.

## Papers Presented in Conferences No.: 03

- 1. "Energy efficient clustering and routing algorithm using modified squirrel search optimization and improved remora optimization for WSN", First International Conference for Women in Engineering (INCOWOCO 2024) during 14-15 November 2024 at Symbiosis International (Deemed University), Pune.
- "A survey of energy efficient optimization algorithms in Wireless Sensor Networks", First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018) during 31<sup>st</sup> October to November 1<sup>st</sup>, 2018 at Gudlavalleru Engineering College.
- "Improving the Network Life Time of Wireless Sensor Network using EEEMR Protocol
  with Clustering Algorithm", International conference on Advancement in Engineering,
  Applied Science and Management (ICAEASM- 2017) on 18<sup>th</sup> June,2017 at Juhu,
  Mumbai.

## Workshops Organized No.: 1

1. "Overview on latest Telecom Technologies by BSNL Krishna during 18<sup>th</sup> to 20<sup>th</sup> December 2014.

### Session Chairs/Reviewers: 03

- Acted as Reviewer in IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT-2024) held from 2<sup>nd</sup> -3<sup>rd</sup> November 2024 organized by IEEE Vizag Bay section at Visakhapatnam, Andhra Pradesh
- 2. Acted as a session chair in International Conference on "Innovative Research in Renewable Energy Technologies (IRRET-2024)" held from 7<sup>th</sup> -8<sup>th</sup> April, 2024 at IMPS college of Engineering and Technology, Malda, West Bengal, India.
- 3. Acted as Reviewer in International Conference on Social and Sustainable Innovations in Technology and Engineering SASI-ITE'24 held from 23<sup>rd</sup> -25<sup>th</sup> February at Sasi institute of Technology and Engineering, Tadepalligudem, Andhra Pradesh.

## Workshops /Seminars Attended No.: 15

- A two day faculty development workshop on "A high impact Design Thinking" from 12<sup>th</sup>
  -13<sup>th</sup> Deceber at Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru organized
  by Innovation and Incubation Cell.
- One day workshop on "Research in Energy Management Wireless Networks & Smart Transportation Systems" on 29<sup>th</sup> March, 2015 at Vijayawada organized by IE(I) Vijayawada Local Centre .

- A one day workshop on "Ultra Low Power Communication using CC430 Microcontroller
   Hands on Experience" on 7<sup>th</sup> February, 2015 at Gudlavalleru Engineering College.
- 4. A two week ISTE workshop on "Control Systems" conducted by IIT Kharagpur from 2<sup>nd</sup> to 12<sup>th</sup> December, 2014 at Gudlavalleru Engineering College.
- 5. One day workshop on "Speech Processing-Current Challenges" on 23<sup>rd</sup> August, 2014 at at Gudlavalleru Engineering College.
- 6. A two week ISTE workshop on "Signals and Systems" conducted by IIT Kharagpur from 2<sup>nd</sup> to 12<sup>th</sup> January, 2014 at Gudlavalleru Engineering College.
- 7. A two day National seminar on "Recent trends and developments in the field of Computer Vision" during 20<sup>th</sup> to 21<sup>st</sup> December, 2013 at VR Siddhartha Engineering College, Vijayawada.
- 8. A two day workshop on "Issues in Integrated Circuit Design" during 13<sup>th</sup> to 14<sup>th</sup> December, 2013 at Gudlavalleru Engineering College.
- 9. A two week ISTE workshop on "Analog Electronics" conducted by IIT Kharagpur from 4th to 14<sup>th</sup> June, 2013 at Gudlavalleru Engineering College
- 10. One week workshop on "Training Teachers for Excellence" during 29<sup>th</sup> April to 4<sup>th</sup> May, 2013 at Gudlavalleru Engineering College.
- 11. National seminar on "Recent Trends in Image Processing Techniques & Applications" on 24<sup>th</sup>December, 2012 at VR Siddhartha Engineering College, Vijayawada.
- 12. A two day workshop on "Akash for Education" conducted by IIT Bombay during 10<sup>th</sup> to 12<sup>th</sup> November, 2012 at Gudlavalleru Engineering College.
- 13. A two day workshop on "Digital Image Processing" organized by department of ECE &ISF in association with Pantech Pro Ed Pvt Ltd. Hyderabad during 27<sup>th</sup>-28<sup>th</sup> July, 2012 at Gudlavalleru Engineering College.
- 14. One day workshop on "Simulation of Electronic circuits using LABVIEW" organized by department of ECE &ISF on 3<sup>rd</sup> February, 2012 at Gudlavalleru Engineering College.
- 15. One day Seminar on "Wavelets & its Applications" on 9<sup>th</sup>August, 2009 at VR Siddhartha Engineering College, Vijayawada.

## Training Programs/FDPs/Refresher Courses Attended No.: 33

- 1. One week Refresher course on "Transmission Lines and Waveguides" organized by the department of ECE, SRGEC during 29<sup>th</sup> January -2<sup>nd</sup> February 2024.
- 2. One week Refresher course on "Microcontrollers and Embedded Systems" organized by the department of ECE, SRGEC during 9<sup>th</sup> -13<sup>th</sup> January 2024.

- 3. One week Faculty Development Program on "Applications of Computer Vision using Deep Learning" organized by the department of ECE, SRGEC during 20<sup>th</sup> -25<sup>th</sup> February 2023.
- 4. A two day faculty training program on "Full Custom IC Design using CADENCE Software Tools" organized by the department of ECE, SRGEC during 4<sup>th</sup> -5<sup>th</sup> August 2022.
- 5. Faculty Development Program on "Insights of NEP 2020 and strategies for its implementation" organized by SRGEC on 12<sup>th</sup> June 2022.
- 6. One day Faculty Development Program on "Intellectual Property Rights" organized by IQAC in association with ISTE at SRGEC on 26<sup>th</sup> March 2022.
- 7. AICTE sponsored online short term training program on "Blockchain Architecture Design and Use Cases" Phase-II organized by the department of ECE, SRGEC during 17<sup>th</sup> -22<sup>nd</sup> August 2020.
- 8. AICTE sponsored online short term training program on "Blockchain Architecture Design and Use Cases" Phase-I organized by the department of ECE, SRGEC during 10<sup>th</sup> -15<sup>th</sup> August 2020.
- 9. Online Faculty Development Program on "Cyber Security" organized by the department of CSE in association with CyberPsy at SRGEC during 22<sup>nd</sup> -26<sup>th</sup> July 2020.
- 10. A one week Online Faculty Development Program on "Recent Trends and Research Areas in Applied VLSI and Advanced Communications" organized by Department of Electronics and Communication Engineering, Vasireddy Venkatadhri Institute of Technology from 8<sup>th</sup> to 12<sup>th</sup> June 2020.
- 11. A three day online Faculty Development Program on "VLSIIC Design Flow", organized by Department of Electronics and Communication Engineering, Anurag University in association with the Institution of Engineers (IEI) and Entuple Technologies from 28<sup>th</sup> to 30<sup>th</sup> May 2020.
- 12. A five day Online Faculty Development Program on "Trends in Communication" organized by Department of Electronics and Communication Engineering, Sir CR Reddy College of Engineering in association with Averzs Technologies from 26<sup>th</sup> to 30<sup>th</sup> May 2020.
- 13. A five day Online Faculty Development Program on "Artificial Intelligence and its Applications" organized by Department of Computer Science and Engineering, Ramachandra College of Engineering from 25<sup>th</sup> to 30<sup>th</sup> May 2020.

- 14. A five day Online Faculty Development Program on "Networking and Cyber Security" organized by Department of Electronics and Communication Engineering, Malineni Perumallu Educational Society's Group of Institutions, in asociation with Supraja Technologies & IETE Vijayawada Chapter from 23<sup>rd</sup> to 27<sup>th</sup> May 2020.
- 15. A three day Online Faculty Development Program on "Network Simulation and Protocol Analysis using NS2 NSG-2.1 and Wireshark" organized by Department of Electronics and Communication Engineering, Narasimha Reddy Engineering College, Hyderabad from 23<sup>rd</sup> to 25<sup>th</sup> May 2020.
- 16. A five day National Level Online Faculty Development Program on "Artificial Intelligence" organized by Department of CSE & IT BVRIT Hyderabad in association with NYCI & BrainoVision solutions India Pvt Ltd from 22<sup>nd</sup> to 26<sup>th</sup> May 2020.
- 17. A five day Online Faculty Development Program on "Data Science and Cloud Computing" organized by Department of Computer Science and Engineering, Chebrolu Engineering College from 18<sup>th</sup> to 22<sup>nd</sup> May 2020.
- 18. A three day Online Faculty Development Program on "VLSI Digital Circuits and Testing Techniques" organized by Department of Electronics and Communication Engineering, Miracle Educational Society Group of Institutions from 21<sup>st</sup> to 23<sup>rd</sup> May 2020.
- 19. A two day Online Faculty Development Program on "Research Opportunities in Electrical Engineering" organized by Department of Electrical and Electronics Engineering, Kallam Haranadhareddy Institute of Technology, Guntur from 20<sup>th</sup> to 21<sup>st</sup> May 2020.
- 20. A one week Faculty Development Program on "Communications and Signal Processing" during 29<sup>th</sup> October to 3<sup>rd</sup> 2018 at Gudlavalleru engineering College.
- 21. A One week National level Faculty Development Program on "Signal and Image Processing using LabVIEW" during 13<sup>th</sup> to 18<sup>th</sup> November 2017 at Gudlavalleru Engineering College.
- 22. A Two day Faculty Training Program on "Advances in VLSI Design and Embedded Systems" during 6<sup>th</sup> to 7<sup>th</sup> November 2017 at Gudlavalleru Engineering College.
- 23. A Two day staff training program on "MATLAB tools for Engineers- Hands on experience" during 10<sup>th</sup> to 11<sup>th</sup> January 2017 at Gudlavalleru Engineering College.
- 24. A one week faculty development program on "Hands of Experience in Signal Processing Applications" during 7<sup>th</sup> to 12<sup>th</sup> November, 2016 at Gudlavalleru Engineering College.

- 25. A two day staff training program on "Simulation of Linear and Digital Integrated Circuits, Microcontroller based Applications using NI Multisim" during 4<sup>th</sup> to 5<sup>th</sup> November, 2016 at Gudlavalleru Engineering College.
- 26. A two week audit course on "Intellectual Property Rights &Patents" during 16<sup>th</sup> to 30<sup>th</sup> May, 2014 at JNTUK, Kakinada.
- 27. A two week audit course on "Research Methodologies" during 1<sup>st</sup> to 15<sup>th</sup> May, 2014 at JNTUK, Kakinada.
- 28. A one week refresher course on "Electronics Devices and Circuits" during 23<sup>rd</sup> to 28<sup>th</sup> September, 2013 at Gudlavalleru Engineering College.
- 29. A two day Orientation program on "MATLAB, Simulink & Related tool boxes for Engineering Education" during 3<sup>rd</sup>-4<sup>th</sup> April, 2013 at Gudlavalleru Engineering College.
- 30. A five day Continuing Education Program on "Embedded System Design based on ARM and MicroBlaze Platforms" during 25<sup>th</sup>-29<sup>th</sup> March, 2013 at NIT, Warangal.
- 31. Faculty development program on "VLSI and Embedded System Design" organized by department ECE in association with IETE Vijayawada Center during 7<sup>th</sup>-8<sup>th</sup> July, 2012 at Gudlavalleru Engineering College.
- 32. One week refresher course on "Pulse and Digital Circuits" organized by department of ECE during 21<sup>st</sup>-26<sup>th</sup> November, 2011 at Gudlavalleru Engineering College.
- 33. A Five day training program on "Mentor Graphics and XILINX tools" organized by department ECE in association with IETE Vijayawada center and ISF during 13<sup>th</sup>-17<sup>th</sup> September, 2010 at Gudlavalleru Engineering College.

### **NPTEL Certificates: 08**

- 1. Analog Communication
- 2. System Design Through VERILOG
- 3. Digital System Design
- 4. Digital Circuits
- 5. Digital Electronic Circuits
- 6. Introduction to Wireless and Cellular Communications
- 7. Electronic Modules for Industrial Applications using Op-Amps
- 8. Integrated Circuits, MOSFETs, Op-Amps and their Applications

### **Subjects Handled**

#### **Under Graduation**

- Switching Theory and Logic Design
- Linear and Digital IC Applications
- Radar Systems
- Data Communication Systems
- Cellular and Mobile Communications

- Satellite Communications
- Wireless Communications and Networks
- Wireless Sensor Networks

#### **Post Graduation**

- Digital System Design
- Wireless Communications and Networks
- Wireless Sensor Networks
- Optical Communications
- Embedded Software Design

#### **Laboratories Handled**

#### **Under Graduation**

- Electronic Devices and Circuits
- Pulse and Digital Circuits
- IC Applications
- Microwave and Optical Communications
- IC and PDC

#### **Post Graduation**

- HDL Programming
- Advanced Communications

## **Other Responsibilities:**

#### **College Level (in GEC)**

- 1. Worked as an Assistant Controller of Examinations (Autonomous) from January 2015 to November 2020.
- 2. Nominated as a member in the Academic Council of the College for a period of two academic years (2022-23 and 2023-24).

#### **Department Level (in GEC)**

- 1. Time table coordinator since June 2021.
- 2. Alumni coordinator since June 2022.
- 3. ECSAt faculty advisor during the academic year 2014-2015.
- 4. IETE Student' Forum faculty advisor during the academic year 2010-2011.
- 5. Training and Placement ECE department coordinator from the academic year 2009-2010 to 2013-2014.
- 6. Department coordinator for "GENECES-Student Paper Presentation Contest" conducted during March 2013 and February 2014.

#### **Declaration**

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

Date:

Place: Gudlavalleru (CH.RAMBABU)