



## **CHANAMALA VIJAY**

**Associate Professor,  
Department of Electronics & communication Engineering,  
Raghu Engineering College,  
Dakamarri - 531162, Andhra Pradesh, INDIA  
[vijay.chanamala@raghuenggcollege.in](mailto:vijay.chanamala@raghuenggcollege.in)**

**Interests: Wireless Communications**

### **UG Level**

#### **Subjects Handled**

1. Linear Integrated Circuit Analysis
2. Computer Network Engineering.
3. Cellular Mobile Communications
4. Fiber Optic Communication
5. Control Systems
6. Computer Networks
7. Digital Logic Design
8. Embedded Systems
9. Wireless Sensors and Networks
10. Microprocessor and Microcontroller

#### **Laboratories Handled**

1. Linear Integrated Circuit Analysis Lab
2. Digital Communications Lab
3. Microwave Engineering Lab
4. Digital Signal Processing Lab for 3/6 MS (B.Tech+M.Tech), ECE, Second Semester.
5. Analog Communication Lab
6. Microprocessor and Microcontroller Lab
7. Digital Image and Video Processing Lab

## **PG Level**

### **Subjects Handled**

1. Microcontrollers & Programmable Digital Signal Processors
2. System Design with Embedded Linux

### **Laboratories Handled**

1. Microcontrollers & Programmable Digital Signal Processors Lab
2. System Design with Embedded Linux Lab

## **RESEARCH PUBLICATIONS**

### **National and International Journals**

1. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Investigation of Optimal Cyclic Prefix length for 4G fading channel", **Springer** Advances in Intelligent Systems and Computing, ISSN-2194-5357, Vol. 695, pp 429-435, 2018, (SCOPUS INDEXED & UGC Approved).
2. Vinodh Kumar Minchula, G. Sasibhushana Rao, **Chanamala Vijay**, "Multi-Antenna system Performance under ICSIT and ICSIR channel conditions", **Springer** Advances in Intelligent Systems and Computing, ISSN-2194-5357, Vol. 695, pp 505-511, 2018, (SCOPUS INDEXED & UGC Approved).
3. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Carrier Frequency Offset impact on LTE-OFDM systems", **Springer** Microelectronics, Electromagnetics and Telecommunications, ISSN: 1876-1100, Vol. 521, pp 401-408, 2018, [https://doi.org/10.1007/978-981-13-1906-8\\_42](https://doi.org/10.1007/978-981-13-1906-8_42) (SCOPUS INDEXED & UGC Approved).
4. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Novel Schemes for Minimizing the PAPR in LTE-OFDM System", **IEEE** International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering (ICRIEECE), DOI: 10.1109/ICRIEECE44171.2018.9009380.
5. **Chanamala Vijay**, G. Sasibhushana Rao, "Performance Analysis of Various PAPR Reduction Schemes for 4G-LTE Cellular Mobile Systems", International Journal of Innovative Technology and Exploring Engineering (**IJITEE**), ISSN: 2278-3075, Vol.8, Issue: 7S2, pp 655-661, 2019 (SCOPUS INDEXED & UGC Approved).
6. **Dr.Ch. Vijay**, D. S. P. Alekhya, D. H. N. Eshwitha, N. Sampath Varma, J. Krishna Chaitanya, "Arduino UNO based Fire Fighting Robot using Mobile Platform",

International Journal of Scientific Research in Engineering and Management (IJSREM), ISSN : 2582-3930, Vol : 04, Issue : 04, April-2020.

7. **Dr.Ch.Vijay**, D.Alekhya, B.Yellaji, K.Prameela, K.Upendra Surya Tej, "Study Of Frequency Offset in SDR Communication System", International Journal of Creative Research Thoughts (IJCRT), ISSN : 2320-2882, Vol : 09, Issue : 07, July-2021.
8. **Dr.Ch.Vijay**, SK.Mukaram, S.Estarini Vasantha, T.Yoshita Sri, V.G.V.Sagar, "Survey And Analysis Of SDR Based Frame Synchronization Using Barker Codes", International Journal of Creative Research Thoughts (IJCRT), ISSN: 2320-2882, Vol : 09, Issue : 07, July-2021.
9. Dr. Sonali Dash, **Dr. Ch. Vijay**, P. Sowmya, T. Ajith Kumar, T. Bhargav Sai, S. Jayasri," Blood Vessel Segmentation Based On Image Enhancement Technique" International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN No: 2319-7463, Vol. 11, Issue 6, June, 2022.  
(DOI : <https://doi.org/10.55948/IJERSTE.2022.0604>)
10. **Dr.Ch.Vijay**, Srikanth Karingana, VVS Varshitha Kuncha, Divya Mamidi, Deva Namala,"Study Of Spectral Efficiency In Massive MIMO", International Journal of Innovative Research in Technology(IJIRT), ISSN: 2349-6002, Vol: 9, Issue:1,June-2022.
11. **Dr.Ch.Vijay**, S. Srinivas Rao, S. Viswanadh, P. Teja Kumar, M.D.S.S. Phanindhar, "Dynamic Vehicle Charging System", International Journal of Innovative Research in Technology(IJIRT), ISSN: 2349-6002, Vol: 9, Issue:1,June-2022.
12. Dr.Ch.Vijay, , B. Jana Priya,CH. Keerthana,A. G U Deepak, CH. Arun, B. Bharath, " QR Based Traffic Management System For Emergency Vehicles", International Journal of Emerging Technologies and Innovative Research (JETIR), ISSN: 2349-5162, Vol: 10, Issue:5,MAY-2023.
13. Dr.Ch.Vijay, K. Kalyan, M. Rishitha,M. Tejasmukhi, V. Durga prasad, S. Shivaji, " Vehicle Anti-Theft Detection And Protection With Facial Recognition And IOT Notification", International Journal of Scientific Research in Engineering and Management (IJSREM), ISSN: 2582-3930, Vol: 7, Issue:5,MAY-2023.

## **National and International Conferences**

1. **Chanamala Vijay**, G.Sasibhushana Rao, "Performance Analysis of Various PAPR Reduction Schemes for 4G-LTE Cellular Mobile Systems", **Springer** International Conference on Wireless Sensor Networks, Ubiquitous Computing and Applications, GRIET Hyderabad, Aug 24<sup>th</sup>&25<sup>th</sup> 2018.
2. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Novel PAPR Schemes in LTE-OFDM System", **IEEE** International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering, School of Electrical Engineering, KIIT- Bhubaneswar, July 27th & 28th 2018.
3. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Carrier Frequency Offset impact on LTE-OFDM systems", **Springer** International Conference on Microelectronics, Electromagnetics and Telecommunication (ICMEET), Department of Electronics and Communication Engineering, Gayatri Vidya Parishad College of Engineering, Visakhapatnam, Feb 3rd and 4th 2018.
4. **Chanamala Vijay**, G.Sasibhushana Rao, Vinodh Kumar Minchula, "Investigation of Optimal Cyclic Prefix length for 4G fading channel", **Springer** International Conference on Frontiers of Intelligent Computing: Theory and applications (FICTA ), School of Computer Applications and Computer Engineering, KIIT- Bhubaneswar, Oct 14th and 15th 2017.
5. Vinodh Kumar Minchula, G.Sasibhushana Rao, **Chanamala Vijay**, "Multi-Antenna system Performance under ICSIT and ICSIR channel conditions", **Springer** International Conference on Frontiers of Intelligent Computing: Theory and applications (FICTA ), School of Computer Applications and Computer Engineering, KIIT- Bhubaneswar, Oct 14th and 15th 2017.
6. Vinodh Kumar Minchula, G. Sasibhushana Rao, **Chanamala Vijay**, "Performance Analysis of LTE Systems in T-F Dispersive Channels", pp. 296-302, International Conference on Recent Trends in Engineering, Science and Technology (ICRTEST-2016), **Elsevier** Materials Today: Proceedings, Hyderabad, 25th-27th October 2016.
7. **Chanamala Vijay**, G. Sasibhushana Rao, Vinodh Kumar Minchula, "Improved Clipping and Filtering based PAPR Reduction Techniques in LTE", pp. 290-295, International Conference on Recent Trends in Engineering, Science and Technology (ICRTEST-2016), **Elsevier** Materials Today: Proceedings, Hyderabad, 25th-27th October 2016.
8. **Chanamala Vijay**, Nambari Swathi, G. Sasibhushana Rao, "X-Band Radar RCS Estimation of Various 2D Flat Objects", **IEEE** International Conference on Electronics

Electrical Signaling Communication and Optimization (EESCO), Visakhapatnam, 24<sup>th</sup> and 25<sup>th</sup> January 2015.

9. **Chanamala Vijay**, "VLSI Technology", *CONFICTURA 2K11*, AITAM, Tekkali, 15th and 16th March 2011.

**Texbook Published:**

1.DIGITAL IMAGE PROCESSING, JUNE 2023,AASAN PUBLICATIONS,ISBN:9788119313013

**PROJECTS GUIDED: (With Year)**

**UG LEVEL:**

1. Arduino UNO based Fire Fighting Robot using Mobile Platform-2020
2. Study Of Frequency Offset in SDR Communication System-2021
3. Survey And Analysis Of SDR Based Frame Synchronization Using Barker Codes-2021
4. Blood Vessel Segmentation Based on Image Enhancement Technique-2022
5. Study Of Spectral Efficiency in Massive MIMO-2022
6. Dynamic Vehicle Charging System-2022
7. QR Based Traffic Management System For Emergency Vehicles-2023
8. Vehicle Anti-Theft Detection And Protection With Facial Recognition And IOT Notification-2023

**PG LEVEL:**

1. Optimization of Design Pipelined Radix 16 Using Reversible Logic Gates- 2021
2. A New Energy-Efficient and High Throughput Two-Phase Multi-Bit Per Cycle Ring Oscillator-Based True Random Number Generator-2022
3. Modified Trng Based Two Phase Multi-Bit per Cycle Ring Oscillator for High Fan-Out In IOT Applications

**PH.D: NIL**

**PROFESSIONAL MEMBERSHIPS**

1. IEEE Member – 94002791.
2. The Institute of Engineers (INDIA), Associate Member- AM167509-8.

3. Member of Japan Sakura Science Club (JSSC)-17104181.
4. International Association of Engineers (IAENG) member-290394.
5. Scopus ID: 57201674331

### **Workshop and Industrial Training attended**

1. Underwent industrial training at AIR (All India Radio) Siripuram and Aganampudi, Visakhapatnam on studio equipment, AM and FM transmitters. (2011)
2. Attended short term program on Advanced Engineering Optimization through Intelligent Techniques (AEOTIT), conducted by Department of Mechanical Engineering, SVNIT Surat, Surat, India.(21.03.2016 to 25.03.2016)
3. Attended National Workshop on Advanced Antenna Design (NWAAD-2K16), conducted by Department of Electronics and Communication Engineering, AUCE (A), Andhra University, Visakhapatnam, India.(19.10.2.16 to 21.10.2016)
4. Attended a short course on Signal Processing for 5G Massive MIMO Wireless System, conducted by Department of Electrical Engineering, IIT Kanpur, Kanpur, India.(28.01.2017 to 30.01.2017)
5. Attended National Workshop on Data Modeling and Predictive Analytics, conducted by Department of Computer Science and Systems Engineering, AUCE (A), Andhra University, Visakhapatnam, India. (17.03.2017 and 18.03.2017)
6. Attended One day International Workshop on Advances in Wireless Communications and Antenna Technologies for Space, Vehicular and Ground Applications, conducted by Raghu Institute of Technology (A) and Raghu Engineering College (A), Dakamarri, Visakhapatnam, Andhra Pradesh,India.(12.06.2023)

### **Online FDPs, Webinars and Courses**

#### **Online FDPs and Webinars**

1. Attended CGU-ODISHA International Webinar on "IMPACT OF CORONA VIRUS ON TECHNICAL EDUCATION IN INDIA" on 20.04.2020
2. Attended Webinar on "OrCAD PSpice Session with Entuple" on 14.05.2020
3. Certificate of appreciation on "MATLAB SKILL TEST" on "15.05.2020
4. Attended Workshop on "Python for beginners" on 19.05.2020
5. Attended Webinar on "Application of 5G Technology in IoT" on 30.05.2020
6. Certificate of merit in E-Quiz on EDC,Communications,MATLAB and IoT
7. Attended Technical Lecture Series on AI/ML on 12.06.2020 and 13.06.2020

8. Attended Webinar:ASIC-SOC Design Flow Methodology on 13.06.2020
9. Attended Webinar:Interactive Pedagogical Learning in Electromagnetics using TaraNG 19.0 on 22.06.2020
10. Attended Webinar:Data Analytics Through an Engineers Eye on 04.07.2020
11. Attended Webinar:Virtual Antenna™ Technology on 07.07.2020
12. Attended online one week international e-FDP on PPSB-AIMLOT-2020 from 10.07.2020-14.07.2020
13. Attended Webinar:An overview on Machine Learning based Intelligent,Computing and Applications on 28.07.2020
14. Attended AICTE Sponsored Online Short Term Training Program on "Electromagnetics, Microwave, RF & Antenna Design using Ansys HFSS" from 27.07.2020-01.08.2020
15. Attended Five day professional development programme "NBA in a Nutshell " from 27.07.2020-31.07.2020
16. Attended the webinar on "I Change the World, I am an Engineer" on 01.08.2020
17. Attended the webinar on " IEEE resources for volunteering, education and training " on 26.07.2020
18. Attended webinar on " IoT Research Problem Statements and Entrepreneurship Opportunities " on 19.07.2020
19. Certificate of appreciation for completion of AWS IGNITE lesson 1,lesson 2,lesson 3,lesson 4,lesson 5,lesson 6 and Building a smart device with amazon alexa-IoT webinar quizzes
20. Certificate of appreciation for completion of APP INVENTOR Day1,Day2,Day3,Day4 and Day5 quizzes
21. Attended Webinar on "Exploring IEEE using PVN model" on 13.09.2020
22. Attended Webinar on "Conceptualization of Artificial Intelligence and Machine Learning" on 06.09.2020
23. Attended AICTE Sponsored One Online Short-Term Training Program (STTP-1) on ICT Tools for Engineering College Teaching and Outcome Based Learning from 05.10.2020-10.10.2020.
24. Attended AICTE Sponsored One Week Online Short-Term Training Program (STTP-2) on ICT Tools for Engineering College Teaching and Outcome Based Learning from 26.10.2020-31.10.2020.
25. Attended Professional Development Program on "IEEE Authorship and Publication Ethics" from 14.12.2020-18.12.2020.
26. Attended AICTE-ISTE approved Orientation/Refresher Programme on "Advanced VLSI Design Using Microwind" from 06.05.2021-12.05.2021.
27. Attended webinar on "National Education Policy 2020 - Demystified" on 29.03.2021.
28. Attended webinar on "Printed Electronics - The Technology of the Hour" on 08.05.2021.

29. Attended webinar on “Advanced Spatial Modulation in Emerging Wireless Communications” on 29.05.2021.
30. Attended webinar on “IoT Through Machine Learning” on 26.06.2021.
31. Attended 3-DAY Faculty Development Programme on "Technological Advancements in NAVAL, DEFENSE & SPACE APPLICATIONS: AN INTEGRATED INDUSTRY 5.0 APPROACH" from 08.07.2021-10.07.2021.
32. Attended FDP on “5G Colloquium” from 27.07.2021-31.07.2021.
33. Attended Two-day workshop on COVID on 03.09.2020-04.09.2020.
34. Attended Three-day online Faculty Development Programme on VLSI Design and Development, conducted by Department of ECE in Association with NSRIT- IETE Student’s Chapter, India.(22.06.2023-24.06.2023)

### **Courses Completed**

1. The Teacher and Social and Emotional Learning (SEL)(UDEMY)
2. Fostering Grit As Teachers (UDEMY)
3. Innovation in School Education Through Remote Learning (UDEMY)
4. 100 Kaizen Practices Towards Excellence (UDEMY)
5. MATLAB ON Ramp (MATHWORKS)
6. Tech Wonders For Teachers (UDEMY)
7. AI For Everyone (COURSERA)
8. Understanding 5G:The Next Evolution in Wireless (UDEMY)
9. 5G:Architecture and Key principles (UDEMY)
10. 5G NR Radio Link Control(RLC) Protocol-RAN Layer 2 (UDEMY)
11. 5G Networks Security (UDEMY)
12. 5G Spectrum analysis and its benefit (UDEMY)
13. Antennas - Fundamental Parameters - Theory and Design (UDEMY)
14. Wireless Networking Fundamentals (UDEMY)
15. 5G, 4G-LTE, 3G, 2G Cellular Mobile Communications – Wireless (UDEMY)
16. Programming for Everybody (Getting Started with Python) (COURSERA)
17. 5G Mobile Networks: Modern Wireless Communication (UDEMY)
18. Cybersecurity and Internet of Things (COURSERA)
19. IoT(Internet of Things)Wireless and Cloud Computing Emerging Technologies (COURSERA)
20. Introduction to Artificial Intelligence (AI) COURSERA
21. 5G Deep Dive (UDEMY)
22. CCNA 200-301 (UDEMY)
23. Certificate received for Online course “Satellite Photogrammetry and its Application” conducted by Indian Institute of Remote Sensing (IIRS), during 29-06-2020 to 03-07-2020.

24. Certificate received for Online course ““Global Navigation Satellite System” conducted by Indian Institute of Remote Sensing (IIRS), during 14-09-2020 to 25-09-2020.

### **ACHEIVEMENTS**

1. Nominated for “SAKURA Science Exchange program in Science”, conducted by TOYAMA Prefectural Government, Japan. (05.11.2017 to 11.11.2017)

### **ADMINISTRATIVE POSITIONS HELD:**

1. CRT Co-Ordinator – May 2022-Dec 2022
2. M.Tech Co-Ordinator: 2020-2022 Batch and 2021-2023 Batch
3. Industrial Visit Co-Ordinator-2022-Till Date
4. Department Library Co-Ordinator and College Level Library Co-Ordinator
5. M.Tech Exam Cell Co-Ordinator

### **FOREIGN VISITS**

1. Visited TOYAMA Prefecture, **JAPAN** during 05.11.2017 to 11.11.2017 for SAKURA Science Exchange program in Science.