Name: **DR. MEDIIKONDA CHRISTHU RAJU** 

Designation: Associate Professor

Department: Electronics and Communication Engineering

Experience (in years):

Teaching: 23, Research: 01, Others (If any, Specify):

### 1. Educational/ Technical Qualifications

S.No	Level (UG / PG /Ph.D)	Year of passing	Specialization
1	Ph. D.	2016	ECE (Communications)
2	M.Tech.	2000	Electronics and Communication Engineering
3	B.Tech.	1997	Electronics and Communication Engineering
4	D.E.C.E.	1993	Electronics and Communication Engineering

### 2. Teaching and Learning

- 2.1 Teaching Interests: Electromagnetic Waves & Transmission Lines, Antennas and Wave Propagation, Microwave Engineering, Signals and Systems, Digital Signal processing, Analog Communications ,Digital Communications,Satellite Communications, Electronic Devices and Circuits and Electronic Circuit Analysis.
- 2.2 Novel Teaching & Learning Techniques adopted: WIT & WIL, LBD, Project based learning
- 2.3 Involvement in curriculum updating / Design: Actively involved in the Major projects execution.

### 3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies:.
  - Design of Communication Devices at microwave frequency
  - Establishing rapport between institute and industry partners and active involvement in the execution of projects
- 3.2.CCA/ECA Organized:
  - Actively involved in smooth conduction of workshops and faculty development Programme.
  - Coordinator for National fest organized by HIET in 2009-11.
  - Organized ISTE- Student Chapter at Geethanjali College of Engineering and Technology.
  - Organized IETE- Student Chapter at Indur Institute of Engineering and Technology, Siddipet
  - National Conference conducted by ECE Department of GCET
  - Technical Staff Training Program on "Advanced EDA Tools and Latest Equipments" at GCET.
  - Technical seminars/Project reviews for UG and PG courses
- 3.3.CCA/ECA participated:
  - Actively involved in Convergence, Annual day, Culture day and Sport day
  - Life member of IETE
  - Member IEEE
  - Life member of Indian Society for Technical Education (ISTE)
- 3.4. Counselling and Mentoring Activity:
  - Counselling the needy students and monitoring their progress in attendance as well in Performance
  - Students Mentoring Coordinator



#### 3.5. Committees involved in:

### Department level:

- Academic Co-ordinator committee
- Tutorials and Assignment Co-ordinator.
- Overall AWP, EMTL and MWE Course Co-ordinator.
- Mentor Co-ordinator
- Students Technical Event Co-ordinator.
- Main and Mini projects of IV year B.Tech Co-ordinator.
- Member of Department Development Committee
- Member of Department Academic Committee
- Member of Class Review Committee

#### Institute Level:

- Member Academic Council
- Member Research Committee
- Member Canteen and Library committee
- Member of Anti Ragging Committee
- NBA co-ordinator for criteria 4, 5 and 6 (students' performance and Result analysis) co-ordinator
- Co-ordinator for Industrial Tours and Local Visits.
- Co-ordinator of Stock Verification
- Campus in charge during college day/Fest celebrations.

### 4. Conference / Workshop / Seminar / Guest Lectures:

#### 4.1 Conducted:06

#### 4.2 Attended:

- FDP on "Effective Technical Report writing using Latex" by MGIT on 8 9th June 2020
- FDP on "Artificial Intelligence and Machine Learning for Engineering Applications" by VNRVJIET during 8<sup>th</sup> to 12 June 2020
- FDP on Modern Research trends in communication, Signal processing, VLSI/MEMS byAndhra Loyola Institute of engineering & Technology, Vijayawada from 19th-23rd May-2020
- Workshop on VLSI Chip Design Hands on using open source EDA by E& ICT Academy IIT Guwahati organized at VNRVJIET, Hyderabad from 8th-12th July-2019.
- Workshop on Wireless and Mobile Communication by E& ICT Academy NIT Warangal, organized at VNRVJIET, Hyderabad from 1st-6th July 2019.
- Workshop on Sensor Networks and IOT by E& ICT Academy NIT Warangal organized at VNRVJIET, Hyderabad from 26th-31st Aug -2019.

### WEBNARS attended:

- Latex-a scientific documenting tool organised by vnrvjiet ieee student branch on 21 st may 2020.
- Webinar on "Trends and technologies on VLSI" by pantech e learning on 17th may 2020.
- "Deep Learning using PYTHON" by panimalar institute of technology on 20th may 2020.
- $\bullet\,$  " Recent trends in power electronics using matlab" by st. peters engineering college on  $22^{nd}$  may 2020
- Online quiz on "Self assessment of communication skills" by lords institute of engineering and technology on 14th june 2020

- "Recent trends in wireless communication by Electronics and Telecommunication, R.C. Patel Institute of Technology, Shirpur on 7th june 2020.
- webinar on "Memory techniques for accelerated learning" by annammal college of education for women on 08th june 2020.
- "Machine learning / DL applications for big data environment" by dept of cse, kings engineering college, chennai on 28 th may 2020.
- "Artificial Intelligence employee attirbution application by dept of it, adhiyamaan college of engineering, hosur on 29 th may 2020.
- Virtual reality by department of comuputer science engineering of srm institute of science and technology ramapuram on 14th may 2020

Sl. No	Programme	Duration	Organized by
1.	FDP on "Electromagnetic Theory and Transmission lines with emphasis on Matlab and Ansys"	7 Days	GCET
2.	FDP on "Advanced EDA Tools andLatest Equipments"	ols andLatest 7 Days	
3.	Latest trends and Developments in Microprocessor Applications	02 Days	GCET
4.	FDP on Technical Staff Development Program	03 Days	HET
5.	Advanced VLSI System Design	07 Days	GNEC
6.	High Impact Teaching Skills	(02 Days) 28 <sup>th</sup> feb to 1 <sup>st</sup> March 2011	Mission 10X
7.	RF antenna Design	(07 Days ) 19 <sup>th</sup> June to 24 <sup>th</sup> June 2017.	MGIT
8.	FDP on Effective Methods of Teaching for Engineering Faculty	01 Day (1 <sup>st</sup> September 2012)	IPE, OU
9.	Ten Day Staff Development Programme	10 Days (11 <sup>th</sup> June to 22 <sup>nd</sup> June 2012)	CVR
10.	Research Avenues and Methodologies	02 Days (27 <sup>th</sup> to 28 <sup>th</sup> August 2010)	AEC

11.	Three day Workshop on MATLAB	03 Days (13 <sup>th</sup> to 15 <sup>th</sup> December 2012)	CVR
12.	FDP on Instructional Design and Delivery	05 Days (3 <sup>rd</sup> to 7 <sup>th</sup> December 2013)	ACE
13.	Introduction to Programming : A Pedagogical Approach	17 <sup>th</sup> -21 <sup>st</sup> June 2019	05 / IIT Kanpur
14.	FDP in a NBA NUT SHELL	27 to 31st July 2020	05 / VNRVJIET
15.	World of Cyber Physical Systems and Future Robotics of Industry: Robotics	11 <sup>th</sup> to 12 <sup>th</sup> July 2020	02/ RC Patel Institute of Technology, Shirpur.
16.	Refresher Course on Bharateeya Chaitanyam	June 29 <sup>th</sup> to 05 <sup>th</sup> July 2020	07 / CBIT
17.	ICT Tools for Teaching, Learning Process and Institute	10 <sup>TH</sup> to 21 <sup>st</sup> August 2020	14 / NIT PATNA
18.	Online training Programme on Digital Tools for Writing, Authoring and Reviewing Manuscripts	21 <sup>st</sup> September to 2 <sup>nd</sup> October 2020	12 / NIT Patna
19.	"International webinar on Pivotal role of chemistry/Chemical Engineering in Present Scenario -2020"	20 – 22 <sup>nd</sup> July 2020	03 / VNRVJIET
20.	" Multifunctional Materials"	15 to 16 <sup>th</sup> July 2020	02 / VNRVJIET
21.	One week Online refresher course on "BHAATEEYA CHAITANYAM".	June 29 to 5 <sup>th</sup> july 2020	07 / CBIT

22.	one week short term course/FDP on Big data Analytics	27th April to 01 May 2020	04 /Electronics and ICT Academy and IIT Roorkee
23.	"Python programming with Industry Perspective"	2nd-6th Dec,2019	05/ Electronics and ICT Academy, NIT Patna, and Dept. of ECE&EIE in
24.	Introduction to Programming : A Pedagogical Approach	17 <sup>th</sup> -21 <sup>st</sup> June 2019	05 / IIT Kanpur

## 5. Academic Contribution and Research & Consultancy:

## 5.1. Invited Lectures:

Sl. No	TitleofLecture/ AcademicSession	Titleof Conference/ Seminaretc.	Organised By	Whether international /national
1	Fundamentals in VLSI Technology	Emerging trends in VLSI Technology	GCET (13 <sup>th</sup> to 14 <sup>th</sup> March 2014).	National
2	Application in Science and Technology	ECHO-2013	IIET (15 <sup>th</sup> to 16 <sup>th</sup> February 2013)	National
3	Subject Expert	JNTUH Selection Committee Member	Holy Mary Institute of Engineering and Technology (5 <sup>th</sup> March 2016)	Ratification
4	Microwave Applications in Science and Technology	Guest Lecture	Sai Sudheer Institute of Engineering and Technology for women (8 <sup>th</sup> to 10 <sup>th</sup> September 2012)	College Level
5	Antenna & Wave Propagation	Guest Lecture	AIET 24 <sup>th</sup> October 2017.	College Level
6	Electromagnetic Waves and Transmission Lines	Guest Lecture	AIET 24 <sup>th</sup> February 2015.	College Level
7	Microwave Engineering	Guest Lecture	AIET 27 <sup>th</sup> February 2016.	College Level
8	Antenna & Wave Propagation	Guest Lecture	St Peters Engineering College on February 6 <sup>th</sup> 2019.	College Level

## 5.3. Books published as single author or as editor:

- Antennas and Wave Propagation by Hi-Tech Publishers, Hyderabad
- Electromagnetic Waves and transmission Lines by Hi-Tech Publishers, Hyderabad.

## 5.4. Projects Guided:

a) UG: 41 b) PG: 08

5.5. Research Interests: Communication Engineering and Signal processing

S. No.	Details (Mention year, value etc. wherever relevant)	
1	Research proposal under RESPOND Programme for ISRO Research Grants titled as "DEVELOPMENT OF A MODULAR L-BAND PROFILER FOR ATMOSPHERIC BOUNDARY LAYER AND PRECIPITATION STUDIES".	ISRO Respond
2.	DEVELOPMENT.	Applied under ISRO BASKET 2020
3	OBJECTS AND HUMAN BEINGS BEHIND WALLS	Applied under SERB funding scheme

# 5.6. Ph.D. students:

a) Enrolled: 01

b) Submitted: Nil

c) Awarded: Nil

5.7. Papers published in reviewed Journals:

S. No	Title of the Paper	Journal Name Vol. No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Novel Encoding and Decoding Algorithm for Block Turbo codes over Rayleigh Fading Channel	international journal of computational engineering Research	2250–3005	2.4025	International
2	A Novel Method for Decoding of Block Codes	International Journal of advanced computing (IJAC)	0975-7686	3.0	International
3	Facial emotion Recognition using convolutional neural networks (CNN)	Advanced Science Letters Vol. 26, No. 5, pp. 1803-1812	1936-7317	6.224	International

4	ADVANCED BLIND STICK	The International journal of analytical and experimental modal analysis	ISSN NO:0886- 9367	6.3	International
5	DEVELOPMENT OF A MODULAR L-BAND PROFILER FOR ATMOSPHERIC BOUNDARY LAYER AND PRECIPITATION STUDIES	International Journal of Mechanical Engineering	Issue 5,	Scopus	International
6	Efficient Encoding and Decoding Block Turbo Codes	Journal of Telecommunica tion, Switching Systems and Networks	2022	Impact Factor : 6.1	International

5.8. Papers presented at National / International conferences:

Sl. No.	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1.	Novel Encoding and Decoding algorithm for block turbo codes over fading channel	International Conference on recent Advances in Design, Development and Operation of Micro Air Vehicles		21 -23 <sup>rd</sup> November 2013
2.	Novel Encoding and Decoding algorithm for block turbo codes over Rayleigh fading channel	2 <sup>nd</sup> international conference on communication and signal processing (ICCSP-2013)	International	1 to 3 <sup>rd</sup> April 2013
3.		international conference on Mobile Internet Devices (ICMID-2010)	International	17 – 18 <sup>th</sup> December
4.	A novel method for parallel decoding of Turbo codes".	international conference on advances in information, communication Technology and VLSI design(ICAICV-2010)	International	6 – 7 <sup>th</sup> August 2010

5.	Eefficient decoding algorithm for Block turbo codes using low power VLSI design	International conference on 'Emerging trends in Signal Processing and VLSI Design'	International	10 - 13 June 2010.
6.	A Novel Method for Parallel decoding of Block Codes	International conference on 'Advances in information Communication Technology and VLSI Design'	International	10 - 13 June 2010.
7	Efficient decoding algorithm for Block turbo codes	International conference on 'Emerging trends in Signal Processing and VLSI Design	International	10 - 13 June 2010.
8	"A Novel encoding and decoding algorithm for block codes".	National conference on computing communication and instrumentation (NCCCI-12),		21- 22 <sup>nd</sup> December 2012
9	Block Turbo Codes	National Level Paper Presented on Turbo Encoding and Decoding algorithms for Block Turbo Codes in Newton's Engineering College, Macherla	National	June 2001
10	Reed Solomon Codes	National Level Paper Presented on Block turbo codes in Bhoji Reddy Engineering College, Hyderabad		12-18 <sup>th</sup> June 2002.
11	Static signature verification system	A Two Day National Conference On Emerging Trends In Electronics & Communications Ncetec - 2k14	National	21-22 February 2014
12	A novel encoding and decoding algorithm for block codes	National conference on computing communication and instrumentation (NCCCI-12)		2012
13	Imaging using Phase Coded Complimentary Code	Sustainable Computing and Data	ISBN: 978-1- 6654-7883-0 International	07 April

5.9. Sponsored research Projects: Nil 5.10 Consultancy Projects: Nil

# 6. Awards / Honours received: Nil

7. Motto: To be a good teacher and let us make things happen instead of waiting for things to happen