

1. Name : **Dr. G Manmadha Rao**
2. Address with E-mail, Land line and Mobile Nos.:

Professor,  
 Dept. of ECE  
 Anil Neerukonda Institute of Technology and Sciences,  
 Sanghivalasa, Bheemili, Visakhapatnam,  
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3. Official Address : Same as above
4. Permanent Address : Dr. G Manmdha Rao  
3-191, 5<sup>th</sup> Lane, Adarsh Nagar,  
Old Dairyfarm, Visakhapatnam-530040
5. Nationality : Indian
6. Religion : Hindu
7. Date of Birth :01.07.1972
8. Educational Qualification :  
(from UG onwards)

S. No.	Qualification	University/Institute	Specialization	Department	Other remarks
1	B.E	College of Engineering, Andhra University	ECE	ECE	
2	M.E.	College of Engineering, Andhra University	Electronic Instrumentation	ECE	
3	PhD	Department of ECE, Andhra University	RADAR	ECE	

9. Details of Doctoral Thesis :  
 Area of Thesis work : RADAR Signal Processing  
 Title of Thesis : Design and Performance Evaluation of Non-uniform PRI  
 Radar Signals  
 Supervisor : Dr. K Raja Rajeswari  
 Year of Completion work : July 2013  
 Year of award of Ph.D : June 2014

10. Teaching Experience :

S. No.	Institute / Organization	Position held	From	To	Regular/ Adhoc /Ratified
1	Anil Neerukonda Institute of Technology and Sciences, Visakhapatnam	Professor	02-11-2018	Till Date	Regular
2	GMR Institute of Technology, Rajam	Professor	01- 09- 2016	02.11.2018	Ratified
3	GMR Institute of Technology, Rajam	Associate Professor	01-12-2006	31-08-2016	Ratified
4	GMR Institute of Technology, Rajam	Assistant Professor	09-06-2005	30-11-2006	Ratified
5	Sanketika Vidya Parishadh Engineering College, Visakhapatnam	Assistant Professor	May 2003	June 2005	Regular
6	Dept. of ECE, AU College of Engineering	Teaching Assistant	June 2001	April 2003	Adhoc

**Additional Duties:**

Name of the Institution / Organisation	Designation	Duration		Responsibilities
		From	To	
Anil Neerukonda Institute of Technology and Sciences	Professor	Nov 2018	Till date	<ul style="list-style-type: none"> <li>Head – Training Department</li> <li>Research Committee Convener</li> <li>NBA Coordinator</li> <li>Departmental Academic Committee member</li> <li>Programme Assessment and Quality Improvement Committee member</li> <li>Industry Institute Interaction Coordinator</li> </ul>
GMR Institute of Technology	Professor and Community Radio Station Coordinator	June 2005	Oct 2018	<ul style="list-style-type: none"> <li>Establishment of CRS</li> <li>Monitoring the operations</li> <li>Content creation with the assistance of experts, student, other community members to broadcast.</li> <li>Revenue creation through projects and consultancy for self-sustainability</li> <li>Correspondence with authorities for needy information sharing and renewal of licenses</li> <li>IETE , IT, Purchase, Research, PG Coordinator</li> </ul>
Ravipati Bit power (sister concern of Bull Power Systems Ltd.)	Manager	Jan 1999	Dec 2000	<ul style="list-style-type: none"> <li>Monitoring the performance of Sales and service Team</li> <li>Finding the potential customers and exploring the superiority of product technically and company</li> </ul>
Bull Power Systems Ltd.	Assistant Manager-Service	April 1998	Dec 1998	<ul style="list-style-type: none"> <li>Monitoring the performance of Sales and service Team</li> <li>Finding the potential customers and exploring the superiority of product technically and company</li> </ul>

11. Research projects completed as PI

: 01 (A Programme to create the awareness on

Health & Nutrition for woman & Child Amongst Weaker Sections in Rural areas, NCSTC-DST, Rs. 14,60,000)

12. Research Experience

: 12 years

(A) Ph.D scholars guided

: nil

(B) Ph.D scholars presently working

: 01

**Total Publications:**

Description	Published	Accepted	Name of the publisher / Journal with ISBN / ISSN Number	Year
Research Publications	37(20+17)	--	Mentioned in the Enclosed list	2006 to Till date
Other Publications				
Books ( Pulse and Digital Circuits for JNTUK, Pulse and Digital Circuits)	2		Pearson - 978-81-317-6899-0, 978-81-317-2135-3	2012, 2010

(C) Number of Publications :

S. No	Status of Journal/ Conference	During Ph.D programme	After Ph.D programme
1	International Journals	08	11
2	National Journals	--	--
3	International Conferences	05	07
4	National Conferences	05	--

**International Journals:**

S.No.	Title	Journal	ISSN / ISBN No.	peer reviewed , Impact factor	No. of Co-authors	main author	Year of Publication
1.	Implementation of GOA to Non-Uniform PRI of SFPT for improving Resolution in Radar	International Journal of Innovative Technology and Exploring Engineering (IJITEE) (Scopus)	2278-3075	6.03	3	No	June 2020
2.	Performance Evaluation of Non-Uniform PRI Costas Signal Using Optimization Algorithms	TEST Engineering and Management (Scopus)	0193-4120	0.1	1	Yes	May-June 2020
3.	Rfid Based Smart Trolley for Automatic Billing System	International Journal of Recent Technology and Engineering (IJRTE) (Scopus)	2277-3878	6.04	4	Yes	May, 2020
4.	IOT based Home Automation using Raspberry pi	International Journal of Innovative Technology and Exploring Engineering	2278-3075	6.03	5	Yes	May 2020

		(IJITEE) (Scopus)					
5.	Performance Analysis of Mixed radix Algorithm Based Stream Cipher System for Integers	Journal of Applied Science and Computations	1076-5131	5.8	5	Yes	Jan 2019
6.	Design and Implementation 4-bit Flash ADC using XOR Encoder (Scopus)	Journal of Advanced Research in Dynamical and Control Systems (Scopus)	1943023X		2	No	2018
7.	Design of High Performance Modified Radix8 Booth Multiplier	International Journal of Mechanical Engineering and Technology, (Scopus)	ISSN: 0976-6359	SJR: 0.21/ JIF-9.2286	1	Yes	2017
8.	Speech Signal Enhancement Using Firefly Optimization Algorithm	International Journal of Mechanical Engineering and Technology (Scopus)	ISSN:0976-6359	SJR: 0.21/ JIF-9.2286	1	Yes	2017
9.	Development of GUI Controller for COMINT Scanning Subsystem in Electronic Warfare	Indian Journal of Science and Technology (Scopus)	ISSN: 0974-5645	SJR: 0.16/ 0.234	1	No	2016
10.	Speech Enhancement using Iterative Kalman Filter with Time and Frequency Mask in different Noisy Environment	IJSIP, SERSC	ISSN: 2005-4254		1	Yes	2016
11.	Speech Enhancement using Kalman Filter with Preprocessed Digital Expander in Noisy Environment	Indian Journal of Science and Technology, (Scopus)	ISSN: 0974-5645	SJR: 0.16/ 0.234	1	Yes	2016
12.	Design of Binary Comparators in QCA using 5-input Majority Gate	International Journal of Applied Engineering Research (IJAER) (Scopus)	Print: ISSN 0973-4562. Online: 1087-1090	SJR: 0.2/ 1.8233	1	No	2015
13.	Speech Signal Analysis of Different Species using Cross Spectral Method	International Journal of Applied Engineering Research (IJAER) (Scopus)	Print: ISSN 0973-4562. Online: 1087-1090	SJR: 0.2/ 1.8233	1	Yes	2015
14.	Speech Signal Analysis Using Concentrated Spectrogram Method	International Journal of Signal Processing, Image Processing and Pattern Recognition (IJSIP)	ISSN: 2005-4254		1	Yes	2015
15.	Performance evaluation of acoustic signals for underwater applications in high-frequency range	IJMS (Scopus)	0975-1033 (Online) 0379-5136 (Print)	SJR: 0.21/ 0.313	3	No	2015
16.	Empirical Analysis of Low Power and High Performance Multiplier	Smart Innovation, Systems and Technologies, Vol – 32, Springer-2015 (Scopus)	2190-3018	SJR: 0.17	1	No	2015
17.	Optimization of Radar signals performance using Genetic and	Engineering ,Science and Technology: International Journal (ESTIJ)	Online: 2250 - 3498,	0.356	1	Yes	2013

	Differential Evolution Algorithms		2277-5293				
18.	Performance Evaluation of Non-uniform PRF RADAR Signals using MOGA	International Journal of Electronics and Communication Engineering (IJECE)	2278-9901(print) , 2278-991X	3.2029	1	Yes	2013
19.	Performance Evaluation for Non-uniform PRI RADAR Signals	International Transactions on Electrical, Electronics and Communication Engineering	ISSN: 2249-8921		1	Yes	2012
20.	Multipurpose surveillance robot with two way communication by using ZIGBEE and GSM	International Transactions on Electrical, Electronics and Communication Engineering	2249-8921		1	Yes	2012
21.	Performance Evolution of Non-uniform PRI LFM Signal	International Journal of Engineering Science & Technology	0975 - 5462	0.356	1	Yes	2012
22.	Moving Target Detection Using Costas Signal	International Journal of Engineering Science & Technology	0975 – 5462	0.356	1	Yes	2011
23.	New Approach to MFR Design with an alpha-beta Filters	International Journal of Smart Home <b>(Scopus)</b>	1975-4094	SJR:0.15/0.22	1	Yes	2011
24.	New figures of merit for Range-resolution Radar using Hard and Soft decision concepts	WSEAS TRANSCATIONS ON SIGNAL PROCESSING <b>(Scopus)</b>	1790-5052	SJR:0.13/0.19	5	No	2007

#### International Conferences:

S.No.	Title of the Paper	Conference Name	Hosted by	Date and Year
1.	Speech signal enhancement for Babble Noise using Optimization Algorithm	10th International conference on recent trends in Engineering Science and management	Conference World-NIST, Guntur	12th -13th August, 2017
2.	An Approach of modified Radix-8 Booth Multiplier using Verilog	10th International conference on recent trends in Engineering Science and management	Conference World-NIST, Guntur	12th -13th August, 2017
3.	A stable Electron protocol based on weighted election probabilities for clustered heterogeneous wireless sensor network	International Conference on recent Innovations in Engineering and Technology	GIET, Gunupur	5th – 6th Nov, 2016
4.	Speech signal analysis of different species using cross spectral method	13th International conference on electromagnetic interference and Compatibility (INCEMIC 2015)	Andhra University, Visakhapatnam	22-23, July 2015
5.	Empirical Analysis of Low Power and High Performance Multiplier	ICCIDM-2014, Smart Innovation, Systems and Technologies, Vol – 32, Springer-2015, VSSUT, Burla,	VSSUT, Burla,	20th - 21st Dec - 2014
6.	Underwater Acoustic Channel Characterization for SONAR Applications in indian seas	International Conference on Large Area & Flexible Microelectronics, R.V.College of engineering, Bangalore	R.V.College of engineering, Bangalore	18th -20th , Dec-2014

7.	Performance of Modified Jacobi Sequences with Good Merit Factor	International conference on Advances in Computer Science and Software Engineering (ICACSSE 2014), St. Anns College of Engineering & Technology, Chirala, AP	St. Anns College of Engineering & Technology, Chirala, AP	October 10, 2014
8.	Analysis of stepped frequency pulse train	ICRCC-12, IEEEExplorer, Tiruvannamalai	Tiruvannamalai	21st -22nd December, 2012
9.	Radar Target detection using Linear Discrete Time Frequency modulation	ICSCI-2009, Pentagram Research Center, Hyderabad	Pentagram Research Center, Hyderabad	7th -9th Jan, 2009
10.	Ternary Pulse compression sequence generation and its sidelobe reduction techniques	ICSCI-2008, Pentagram Research Center, Hyderabad	Pentagram Research Center, Hyderabad	2nd -5th Jan, 2008
11.	MIMO-OFDM Channel estimation using special traing sequences	ICSCI-2007, Pentagram Research Center, Hyderabad	Pentagram Research Center, Hyderabad	3rd -7th Jan, 2007
12.	Peak to Average power control in OFDM using multiple signal representation	ICSCI-2006, Pentagram Research Center, Hyderabad	Pentagram Research Center, Hyderabad	4th -8th Jan, 2006

#### National Conferences

S.No.	Authors/Co-Authors Name	Title of the Paper	Conference Name	Hosted by	Date and Year
1	G. Manmadha Rao, Prof. K. Raja Rajeswari	Radar target detection using LFM chirp	NCASP-09	A.U College of Engg.	20 <sup>th</sup> -21 <sup>st</sup> Nov 2009
2	M. Murali, G. Manmadha Rao, Prof. K. raja Rajeswari	Performance evolution of active sonar pulse designs for reverberation processing	NCASP-09	A.U College of Engg.	20-21st Nov 2009
3	M.Murali, G Manmadha rao, Prof. K. raja Rajeswari	Stepped LFM and NLFM Waveform Comparative Studies for Range resolution Radar	SECT '07	Zonal seminar, IETE, Visakhapatnam	10 <sup>th</sup> -11 <sup>th</sup> Feb'07,
4	Prof. K. Raja Rajeswari, M. uttarakumari, G. Manmadha Rao, Ch. Srinivas	Waveform Modeling for high performance RADAR systems	NCSC-06	College of Engg., Bhubaneswar	23 <sup>rd</sup> -26 <sup>th</sup> Mar, 2006, Bhubaneswar
5	G.N Swamy, G. Manmadha Rao, Prof. K. Raja Rajeswari	Isolated word recognition using vector quantization and Hidden Markov models	RACE-05	SRKR Engg. College, Bhimavaram	24 <sup>th</sup> -25 <sup>th</sup> Jan, 2005

#### Completed Projects and Consultancies:

S.No	Title	Agency	Period	Grant/Amount Mobilized (Rs Lakhs)
1	A Programme to create the awareness on Health & Nutrition for woman & Child Amongst Weaker Sections in Rural areas	NCSTC – DST	01 year	14.6
2	Science for Women's Health & Nutrition Base line	CEMCA-NCSTC	02	2.43

	Studies and Capacity Building workshop for community members		months	
3	Community Awareness programme on Health	DAVP, MIB, Govt. of India		12.44
4	Community Awareness camp	IPRD, Govt. of AP and R K SWAMY BBDO PVT. LTD		0.98

#### (D) Research Guidance

S. No.	Number Enrolled	Thesis Submitted	Degree Awarded
<b>M. Phil or Equivalent (M. Tech.)</b>	11		Awarded
<b>Ph. D or Equivalent</b>	1		

#### Areas of research interests

: **RADAR, Speech Signal Processing, VLSI, IOT and Communications**

Subjects taught for UG/PG

: EDC, ECA, VLSI, PDC, AC, SS, DSP, RADAR, RADAR Signal Processing

1. Awards

: Best Teacher

2. Text Books authored

: 02 (Pulse and Digital Circuits)

3. Membership in Professional organizations

: ISTE

4. Other information (if any)

#### Training Courses, Teaching –Learning - Evaluation Technology, Faculty Development Programmes:

S.No	Programme	Duration	Organized by
1	Two week AICTE sponsored FDP on Engineering Challenges for making Digital India: Internet of Things and Applications.	11 <sup>th</sup> – 24 <sup>th</sup> June 2019	ANITS, Visakhapatnam
2	A two day national workshop on OUTCOME BASED EDUCATION & ACCREDITATION(OBE&OBA)	17 <sup>th</sup> – 18 <sup>th</sup> May, 2017	GMRIT, Rajam
3	Advanced Digital Signal processing-GIAN	6 <sup>th</sup> -10 <sup>th</sup> March, 2017	NIT-Rourkela, MHRD
4	Empowering Engineering Faculty in Question paper setting	11 <sup>th</sup> – 12 <sup>th</sup> November, 2016	GMRIT, Rajam
5	Objective Oriented, Enriched, Revised Bloom's taxonomy	16 <sup>th</sup> – 17 <sup>th</sup> September, 2016	GMRIT, Rajam & Thought Links
6	Analog Integrated Circuit Design and ASIC Implementation using Cadence EDA Tools	6 <sup>th</sup> -10 <sup>th</sup> July, 2016	TEQIP-II, ECE dept, Sri Vishnu engg. College for Women(A) & Entuple Technologies
7	A two day national workshop on Patent and Copyrights for Maximizing Research impact(PCMRI-2K15)	26 <sup>th</sup> – 27 <sup>th</sup> December, 2017	GMRIT, Rajam
8	A two day national workshop on Wireless Sensor Networks for Health care & environmental monitoring (WSNHEM-14)	14 <sup>th</sup> – 15 <sup>th</sup> November, 2014.	Dept. of ECE, GMRIT, Rajam
9	Two-Day National Workshop on "VLSI Applications to RADAR and Image processing (VARIP)"	28.02.2014 - 01.03.2014.	GMRIT, Rajam
10	Three-Day National Workshop on "Swarm Intelligence:Theory & Applications	25-27 May, 2012	School of Electrical Sciences, IIT Bhubaneswar
11	Two Day National Workshop on "Soft-Computing Applications to Communications and Management"	28 <sup>th</sup> - 29 <sup>th</sup> April, 2012	Organised jointly by Department of ECE & EIE,

			AITAM, Tekkali.
12	Five Day Workshop on “MISSION-10X”	19 <sup>th</sup> -23 <sup>rd</sup> May -2011	conducted by WIPRO at GMRIT, Rajam.
13	Two Day National workshop on “Advances in Signal & Image Processing(ASIP2008)	20 <sup>th</sup> - 21 <sup>st</sup> October 2008	JNTU, Kakinada.
14	Two Day National workshop on Microprocessors and Microcontrollers	18 <sup>th</sup> -19 <sup>th</sup> , February 2008	GMRIT, RAJAM.
15	One day National workshop on Advances in Soft computing and Signal Processing(WAS <sup>2</sup> P-07)	23 <sup>rd</sup> December2007	DIET, Anakapalli.
16	Two Day National workshop on Recent Trends in Nanoelectronics	8 <sup>th</sup> -9 <sup>th</sup> September, 2006	GMRIT, RAJAM.
17	Professors’ workshop on VLSI & Embedded Systems by IIIT – Altera	24 <sup>th</sup> – 25 <sup>th</sup> , March 2006	IIIT, Hyderabad.
18	Two Day National Workshop on VLSI Embedded Systems	17 <sup>th</sup> – 18 <sup>th</sup> , February 2006	GMRIT, Rajam
19	International Radar Symposium India 05 (IRSI-05)	December 19 <sup>th</sup> – 22 <sup>nd</sup> , 2005	IISC, Bangalore
20	Workshop on Advances in Signal Processing	November, 11 <sup>th</sup> – 12 <sup>th</sup> 2005	GITAM, Visakhapatnam
21	Short Term Course on Methods of Improving Teaching Techniques by National Institute of Technical Teachers Training and Research	December 05 <sup>th</sup> – 10 <sup>th</sup> 2005	GMRIT, Rajam.
22	Short Term Training Programme on Recent Trends in Digital Signal Processing and its Applications	May 17 <sup>th</sup> – 28 <sup>th</sup> , 2004	SSN College of Engineering, Chennai.
23	Staff Development Programme for Engineering College Teachers training on Pedagogy	29 <sup>th</sup> December 2003 to 11th January 2004	Andhra University, Visakhapatnam.

**Invited Lectures and Chairmanships at National or international Conference / Seminars:**

S.No	Lecture / Academic Session	Title of Conference / Seminar	Organized by	Date (s) of the event	International/ National/State
1	Academic Session	e-arena	A.U College of Engg	7 <sup>th</sup> -8 <sup>th</sup> Dec 2006	National
2	Academic Session	NCASP-09	A.U College of Engg.	20 <sup>th</sup> -21 <sup>st</sup> Nov 2009	National
3	Lecture	Community Radio Awareness Workshop	CEMCA	30th -31st January 2017	National
4	Lecture	Guest Lecture on Pulse and Digital Circuits	Avanthi’s St. Theresa Institute of engineering and technology, Garividi, Vizianagaram	21 <sup>st</sup> September 2019	