Curriculum vitae of Dr.S.Narayana Reddy

1. Name **:** **DR. S. NARAYANA REDDY**

2. Designation : **Professor**

3. Department : Electronics and Communication Engineering

4. Date of Birth : 15-03-1964

5. Address : Professor of ECE , University College of Engineering
S.V.University, Tirupati-517 02 , INDIA

6. Area of Specialization: Communications Systems

7.Academic qualifications:

Exam Passed	Board/University	Subjects	Year	Division/ Grade Merit etc.
High School	Board of Secondary Education, A.P	All	1980	Distinction
Higher Secondary or Predegree(Intermeiate)	Board of Intermediate Education,A.P	Mathematics, Physics, Chemistry	1982	Distinction
Bachelor's Degree (s) (B.Tech)	J.N.T.University Hyderabad	Electronics and Communication Engineering	1986	Distinction
Master's Degree (s) (M.Tech)	I.I.T. Kharagpur	Microwave and Radar Engineering	1988	Distinction
Research Degree(s) (Ph.D)	S.V.University Tirupati	Some advanced techniques for error evaluation and correction to enhance measurement accuracy of Microwave networks	1999	

8. Exprerience : 25 years

Designation	Institution/University	From	To
Scientific Officer SC	SAMEER,Mumbai Dept.of Electronics Govt. of India	02-02-1989	15-09-1992
Assistant Professor in ECE	S.V.University Tirupati	16-09-1992	01-02-1999
Associate Professor in ECE	S.V.University Tirupati	02-02-1999	06-06-2006
Professor of ECE	S.V.University Tirupati	07-06-2006	Till to date

9.Research experience

Research Stage	Title of work/Theses	University where the work was carried out
M. Tech	De-embedded Techniques	I.I.T.,Kharagpur
Ph.D.	Some advanced techniques for error evaluation and correction to enchance measurement accuracy of microwave networks	S.V. University, Tirupati
Publications	84 journals 37 conferences	
Research Guidance	37 M.Techs completed.(list enclosed) 10 Ph.D completed(list enclosed) 12 Ph.D.s under pipeline.	S.V. University, Tirupati

10.Reaesrch projects Completed/ongoing.

Research Project	Funding agency	Duration	Amount
1.Design and Development of high power solid state transmit receive module at VHF frequencies (Principal Investigator)	ISRO	2006-2008	11.60 lakhs
2. Radar Signal Processing Techniques for detection of Meteors using wavelets (Co-investigator)	DRDO	2011-13	10.27 lakhs
3.Center of Excellence on Atmospheric remote sensing and signal processing(Principal Investigator & Coordinator)	World Bank & MHRD, Govt.of India	2013-2016	500 lakhs
4.TEQIP 1.2 for Scaling- up PG and Research Education (Coordinator)	World Bank & MHRD, Govt.of India	2012-2016	1250 Lakhs

11.Foreign visits:
 1.Visited London to present paper in 1991.
   2.   Visited Bangkok, Thailand on 25th Jan, 2014 for attending International Conference on Advances in computer Science, Electronics and communication technologies to present paper entitled "design and implementation of image fusion technique using DWT for Micro air vehicle.

 12.Patents Taken :

        Patent No: 3170/CHE/2015
     "Design and performance analysis of discrete wavelet transform based image fusion and compression for micro air vehicle applications"

13. Awards:
        1.Engineer of year -2015 for Andhra Pradesh and Telengana by Institution of Engineers, A.P.& Telengana center.
        2.Eminent educationist-2014 by Indus Foundation,USA

13. Administrative experience :
     1.Worked as NCC officer for S.V.U.College of Engineering
     2. Worked as Dy.Waden,Warden and Addl.Chief Warden for
               S.V.U.College of Engg Hostels
     3. **Founder Head , Department of ECE from 2011-13**
        As Head of Department
        a) Started M.Tech in signal processing from 2013.
        b) Center of Excellence (COE) is proposed and got sanctioned on 'Remote sensing of atmosphere and advanced signal processing' under TEQIP 1.2.1.
        c) Activated remote center under MHRD through IIT,Bombay and number of programs are conducted and AKASH tablets are distributed to faculty and students.

14.Academic positions:

1. Member,UG and PG Board of studies-EECE of S.V.University(2005-2008).
2.Chairman,UG Board of studies_EECE of S.V.University (2008-2011).
3.Chairman, Board of studies-ECE of S.P.Mahila University(Tirupati(2008 onwards).
4.Member,Board of Studies –ECE of S.K.University(2009 onwards)
5.Member,Board of Studies(PG)-ECE of JNT University,Anantapur (2010 onwards)
6.Member,Board of Studies(UG)-ECE of JNT University,Anantapur(2012 onwards)
6.Member,Board of Studies_EIE, Sri Vidyaniketan Engineering College (Autonomous),
   A.Rangampet, Chittoor(Dt)
7.Member,Board of studies,ECE,LBR College of Engineering(Autonomous),Krishna(dt)

15.Student activities :

1. Co-ordinator for Harivillu (cultural festival)-2005 for B.Tech(FDH) students.
2. Co-ordinator for Rhapsody(cultural festival)-2006 for B.Tech students.
3.Conducted student paper symposium on Electrical, electronics, communications and
   computer science as convener

16. Membership of Professional Bodies, Societies ..:
   Fellow, Institution of Engineers(India)
   Fellow, Institution of Electronics and Telecommunication Engineers
   Life Member, Indian Society for technical education.

17. Details of Seminars, Conferences, Symposia organized :

S.No	Name of Conference/Seminar/workshop	Duration
1	National conference on Role of Engineers in e-Governance	2003
2	National conference on Radar technology and signal processing techniques	2006
3	All India seminar on Mechatronics and Instrumentation, June 29-30 2007.	2007
4	One day workshop on advances in signal and image processing. April 2014	25-04-2014
5	Three day Seminar/conference on energy security through new and renewable energy resources	August 2015

18. Editorship of Journals /Conferences:
        Guest Editor for Asia-pacific microwave conference-2008.
        member of Editorial Board/Reviewer's Team, **IRA PUBLICATIONS**

19. Extension Work :
   1.Secretary, IETE Tirupati sub-center
   2.Treasurer, IETE Tirupati sub-center
   3.Treasurer. Tirupati center IETE
   4.Executive member, Institution of Engineers(India)-Tirupati center 2012-14
   4.Hon.Secretary, Institution of Engineers(India)-Tirupati center 2014-16

20. Important Committees served as Expert member

   1.Expert member(Advisor) ,UPSC interview boards-Civil services(mains),IES
   2.Expert member in AICTE committees
   3.Expert member, university appointment committees
   4.Member, .University affiliation committees
   5.Coordinator,TEQIP II 1.2
   6.Coordinator ,TEQIP II 1.2.1(COE)
   7.Principal Investigator TEQIP II 1.2.1,COE
   8.PGECET member, Govt. of A.P. for the year 2015

21.Present position and Office Address with
   Telephone Number: Professor & Chairman, Board of Studies
                         Department of Electronics & Communication Engineering
                         S.V. University,
                         Tirupati-517502
          Ph: +919848927815
          Email: snreddysvu@yahoo.com

Chairman	- Board of Studies, Electronics & Communications Engineering(ECE), S.V. University, Feb'2014 to Till Date
Member	- Department Research & Development Committee of ECE, S.V.University, Feb'2011 to Till Date.
TEQIP Coordinator	- S.V.University College of Engineering, April, 2014 to till date.
Principal Investigator	- Center of Excellence(COE)-Principal Investigator, Nov,2013 to till date
Chairman	- Board of Studies, Electronics & Communication Engineering, Sri Padmavathi Mahila University, Tirupati, 2008 to Till date
Member	- Board of Studies, ECE,LBR College of Engineering, Mylavaram,Krishna(Dt), 2014 to Till date
Hon. Secretary	-Institution of Engineers(India),Tirupati Local Centre, 2014 to Till Date
Chairman	-Security and Discipline committee for installing CC Cameras and Bio-metric systems, S.V.U.College of Engineering, Tirupati
Committee member	- PGECET-2015,Andhra Pradesh
Member	- Editorial Advisory Board, i-manager,s Journal on digital signal processing(JDP)

22.Positions held earlier :
   Founder Head   - Department of ECE, S.V.University, Sept.'2011 – Sept.'2013
   Chairman   - Board of Studies, Electrical, Electronics and Communication Engineering,
                         S.V.University, Tirupati, 2008 – 2011.

Expert member	-	Confidential Boards of Govt.of India, State Govts.
Hon.Secretary	-	The Institution of Electronics & Telecom.Engineers, Tirupati Local Centre, 2006 – 2008
Coordinator	-	Center of Excellence(COE),2013-14
Member	-	Board of Studies,ECE , S.K.University,Anantapur,2009-2012
Member	-	Board of Studies(PG),ECE JNT University,Anantapur ,2010-12
Member	-	Board of Studies(UG), ECE of JNT University,Anantapur,2011-13
Member	-	Board of Studies_EIE, Sri Vidyaniketan Engineering College (Autonomous), A.Rangampet, Chittoor(Dt)
Guest Editor	-	Asia-pacific microwave conference-2008.
In-Charge	-	microwave Lab, Communication Lab, IC applications Lab etc.

23. The field of work : Electronics and Telecommunication Engineering &
Design and development

Prof. S.Narayana Reddy served as Scientific officer SC in SAMEER, Dept.of Electronics, Govt. of India , Mumbai during 1989 to 1992. He joined as Assistant professor in the Department of Electrical and Electronics Engineering, S.V.University in 1992. He was promoted as Associate Professor in 1999 and as Professor in 2006. He held several administrative positions in S.V. University including the NCC officer, Dy.Warden, Warden, Head of the department, COE coordinator, TEQIP coordinator.

Prof. S.Narayana Reddy has been an inspiring teacher and an eminent researcher. He worked in the design and development of Indian MST Radar working at Gadanki as Scientific officer and was instrumental in the development of 1 KW amplifier and 12 KW amplifier. He was Dy.Operational Manager for installation and commissioning of MST Radar. He undertook developing new techniques for error evaluation and correction of high frequency measurements using HP8510 network analyzer. He executed two R& D projects from ISRO on design and development of transmit/receive module and signal proceeding techniques for detection of meteors. He along with his team developed wind profiling radar for probing the boundary layers of atmosphere. Many new signal processing techniques are developed for processing of atmospheric signals using different types of windowing techniques, wavelet transforms and Hilbert transforms. New fusion techniques are developed for fusion of images and a patent has been filed on this technique. A cyclostationary technique is developed for cooperative spectrum sensing techniques.

Prof. S.Narayana Reddy guided 10 students for their Ph.D. degrees and 37 students for their M.Tech. degrees in the areas of Radar systems development, fuzzy systems, Signal processing Image processing and spectrum sensing techniques. He organized 10 national and international conferences/seminars/ workshops/symposia/conventions. He published 110 original research papers in various national and international journals of repute. He is a consulting editor to the i-manager's Journal on digital signal processing(JDP)Mechanical Engineering and reviewer of many conferences including Asia-pacific conference on microwaves. In recognition of his academic brilliance and innovative research, he was appointed as Expert member for Civil services interview board, Indian Engineering services (IES) selection by UPSC and Expert member by AICTE, Member of many A.P. state Govt. committees and university committee. In recognition of his research work his paper are awarded as best paper at Radar symposium.he was also recipient of Eminent Educationist award by The Indus foundation,USA.

Prof. S.Narayana Reddy is Life Member of many National and International professional bodies that include Fellow of The Institution of Engineers (India), Fellow of the Institution of Electronics and Telecommunication Engineers, Member Society for technical Education, Member Institution of Electrical and Electronics Engineers(IEEE). He is Chartered Engineer and serving as Hon. Secretary of the IEI-Tirupati Local Centre. He has been expert member to

UPSC selections such as Civil Services, IES. Committee Member of PGECET for the year 2015. He successfully completed several R&D projects.

24.Significant contribution to Engineering

New architectures and experimental setup is proposed, developed, designed and implemented to reduce power dissipation in realizing the complex DWT architecture for Compression and Fusion for Micro Air Vehicles(MAV). The hardware Fusion model for DWT can be developed for real time implementation optimizing for area, power and speed performances. Proposed work improves 1.3 times speed and 25% of power with reference and a **patent is filed on "'Design and performance analysis of discrete wavelet transform based image fusion and compression for micro air vehicle applications".**

- The Research work is carried to Design and Develop Doppler Wind laser radar for atmospheric applications. Laser Radar focuses on study of the atmosphere dynamics, as wave information can be inferred from the wind measurements, measurements of stratospheric and lower mesospheric winds, general circulation of the atmosphere, momentum flux and the energy budget of the stratosphere and mesosphere, Climatological purpose and for continuous picture of the velocity fields..

- Develop Wind profiling Radar installed at NARL, Gadanki for remote sensing the atmosphere and using as tool for measuring the height profile of wind vector with time- and height resolutions in all weather conditions. Measures the wind by detecting the Doppler shift of echoes from turbulent irregularities of radio refractivity.

- With the exponential growth of wireless communication, it becomes an important to tackle the spectrum scarcity problem. Most of TV licensed spectrum band, users only utilize their chosen resources partially, thus force the need of cognitive radios (CR) which offers the capable feature of accessing the unused spectrum by dynamic spectrum. In this paper, we are presenting the cyclostationary detection method for estimation and spectral autocorrelation function technique to analyze the spectrum. cyclostationary feature detection under modulation scheme to detect the primary users at very low SNR and enhancing cyclostationary feature detection with peak detection algorithm for effective performance.

- Design of the microstrip antenna using MATLAB software and IE3D is developed.Using the finalized single element antenna as basic radiating element a microstrip planar sub arrays has been successfully developed in L-band. By using these sub arrays the finalized 256 element (16X16) planar array was designed. The design and simulation of this antenna has been used the Method of Moment technique. The integral equations are transformed into algebraic equations and are solved useful as light weight antennas in place of large antennas.

Research work carried out at NARL,Gadanki (unit of ISRO) in the area of Radar systems and Signal Processing has achieved ***wind profiler Radar development and it is first of its kind in India.***

- Previously tube version of 1 KW amplifier are available and solid state amplifier at 1280 MHZ is developed which is compact and easy to transport.
- The signal processing algorithm developed yield better Doppler wind profile and more than 20 dB signal to noise ratio(SNR) using variable window techniques, Wavelet transforms and adaptive techniques.
- By implementing **cyclostationary detection techniques** in the cooperative sensing methods under utilization of spectrum is reduced.
- Better understanding of atmosphere structure by study of physical interactions like absorption, emission, scattering, processes, and spectroscopy using LIDAR remote sensing.

- **Lifting DWT architecture design** is implemented on Spartan III device and is compared with lifting scheme . The proposed design operates at frequency of 268 MHz and consumes power less than 42 mw. Which is 4 times of frequency improvement and 48 % improvement in power with reference design.
- Better **fusion techniques for MAVs** are implemented using different filters like Haar, Daubechies and Bi-orthogonal, It is stated that Daubechies 9/7 results in higher PSNR value.
- **Center of Excellence (COE)** was established on "remote sensing and advanced signal proceesing" under the grant of 5 crores from World Bank-MHRD. A M.Tech course in **signal processing** started in the year 2012 under ECE department.

25.Impact of the contributions in the field concerned on society at large. Development of Solid state 1 KW amplifier at 1.28 GHZ has excellent applications in wireless communication and the same can be used in portable wireless stations.

- The signal processing techniques and atmospheric models developed are useful to predict the atmosphere conditions. These models developed useful for the optimal production planning for various crops . In a country like India whose rural economy is mostly agriculture based, a sustainable development in the context of globalization is only possible by way of implementing and predicting the atmosphere in the long run.
- Pollution models of atmosphere are proposed which gives the sulphur, carbon contents in the atmosphere and its effects on health. Radiation effects are being studied as case study .This may have adverse epidemic effects.
- Conducted several training programmes for skilled and unskilled labour like motor winding ,Cell phone repairs etc. at S.V. University.
- Involved in literacy improvement and energy awareness program through Energy conservation mission at Tirupati.
- Organized awareness campaign on water requirements of Rayalaseema for drinking and Irrigation at IEI premises in the capacity of Hon.Secretary, IEI, Tirupati local centre.

26.Whether achievements have already been recognized by any learned/professional body :

2012-Best paper award at S.V.University

2012,2013- EXPERT COMMITTEE MEMBER, UPSC CIVIL SERVICES & IES

2014 – Eminent Educationist Award from Indus foundation
2015-Engineer of the year award by Institution of Engineers (A.P. & Telangana)

27.Patents Taken :

Patent No: 3170/CHE/2015
"Design and performance analysis of discrete wavelet transform based image fusion and compression for micro air vehicle applications"

List of Ph.D Thesis Supervised - Completed

S.No	Name of the Student	Title	Year of Registration
01.	G.Sreenivasulu	Design and performance studies of different controllers for superheated steam temperature system	2007
02.	T.Ramashri	Robust content based hybrid image watermarking algorithms using decimal sequences	2009
03.	V.R.Anitha	Design and Analysis of a Square micro strip planar array for wind profiling Radars	2009
04.	G.Harinatha Reddy	The Effect of Window parameters on the improvement of SNR of	2009
05	K Raghunath	Design and development of Doppler wind laser radar for atmospheric applications	2013
06	K Nagi Reddy	Some spectral estimation techniques for signal to noise ratio(SNR) improvement of MST radar signals	2013
07	P.Sreenivasulu	Design,development and validation of a simplified active array L-band radar wind profilier	2013
08	C. Chandrasekhar	Design and Performance Analysis of Discrete Wavelet Transform based Image Fusion and Compression for Micro Air Vehicle Applications	2014
09	S. Mallikarjunaiah	Design of Different Controllers and their comparison for a Flexible Link Manipulator	2014
10	P.Venkata Ramana	performance improvement of cooperative spectrum sensing in cognitive radio networks using energy and cyclostationary detection	2015

List of M.Tech dissertations guided - Completed

S.No	Name of the Student	Title	Year of Registration
1	G. Venkateswara Reddy	Intel 8031 based stationary and mobile target controller	1995
2	G Naga Laitha	Cell phone detector for mobiles in active mode	1997
3.	D.Murali Krishna	Number plate recognization using optical character reorganization technique	1997
4	P. Vijitha	Mixed excitation linear predictive coding algorithm	1998
5	V,Nageswara Rao	Implementation of physical layer of CDMA based station coder	1999
6	P.Ramakrishna Reddy	Design of Fuzzy logic based controller for superheated steam temperature	2000
7	K Mallikarjuna	Software Development for the design of Lead and Lag Compensators in Control Systems	2001
8.	G. Raja Kumar	Study of OSI protocols and implementation of ACSE APDU	2001
9.	D. Radhika	Implementation of Adders and Multipliers in VHDL	2002
10.	P.Venkata Ramana	Echo canceller in digital hybrid telephone networks	2003
11.	B.Dilip Kumar	Digital signal processor based graphics system	2004
12.	P.Sudeer Babu	Analysis of ECG using artificial neural networks	2004
13.	K. Irshad Ahmed	Implementation of extended fast connect in H-323 terminal	2004
14	NHNS. Srinivasa Murthy	Face re-cognization using Eigen values	2005
15	G.Sarveswara Rao	Microprocessor based interlock and control systems for MST Radar transmitter	2005
16	K.Srinivasa Kumar	Simulation of Gaussian minimum shift keying through MATLAB	2005
17	B. Hari Prasad	Speech Coding Using Linear Predictive Coding	2005
18	T. Nirmala	Generation and Reconstruction of PCM using Compander through Matlab	2005
19.	K..Venkata Prasad	Hot standby router protocol	2006
20.	T. Vinod Kumar Singh	Router control mechanism for congestion avoidance in IP based CDMA Radio access network	2006
21	P S Shalini	Atmospheric Radar Backscatter Modeling to Determine Wind Velocity	2006
22	V. Nageswara Rao	Implementation of Physical Layer of CDMA base Station coder using VHDL	2006
23.	N.Vinod	Receiver Design for OFDM based IEEE 802.11a WLAN standard	2007
24.	M..Dasaratharami Reddy	Adaptive Bayesian Estimation approach for GPRS wireless networks	2007
25	Narayana Swamy B.K	Design and Implementation of RF Components for L-Band Radar TR Module	2008

26	K Rajesh	Image Compression Quality Measurement	2008
27.	K.M.Prasad	Design and implementation of data acquisition system for turbojet engine	2009
28	T.Ajay Sagar	Sharpness enhancement and noise removal of gray images by using adaptive bilateral filter	2010
29	P. Pallavi	Document Image Mosaicing	2010
30.	P.Subba Lakshmi	Radar signal processing for atmospheric wind profiling application	2011
31	M.Ramamohan Reddy	Morphological background detection and enhancement of images with poor lighting	2011
32	V. Guru Teja	ECG Signal Denoising by Wavelet transform thresholding and R-Peak Detection.	2011
33	P Gouthami	Performance of Tukey window in improving the signal to noise ratio (SNR) of atmospheric signals	2012
34	B Sreenivasan	Noise cancellation on ECG and heart rate signals using the undecimated wavelet transform	2012
35	M Kalyani	Signal to noise ratio improvement of MST Radar signals using DB9 wavelet	2013
36	G S Satish	Signal to noise ratio improvement of lower atmospheric signals using wavelets	2014
37	C Kavya	Advanced Signal Processing using Wavelets for Wind profiler Radars	2015

Publications

International Journals:

1. S.N.Reddy and N.C.E. Reddy., "Explicit expressions for error correction in generalized two port device S-Parameter measurements", AMSE Journal (France), Vol. 48, No. 23, Winter 1996.

2. Anitha and S.Narayana Reddy, " Design and analysis of a 1 X 16 square microstrip linear array for wind profiling radar", International journal of theoretical and applied information technology,vol.4,no.10,pp 981-988,Oct.2008.

3. Anitha V.R, S. Narayana Reddy, P. Srinivasulu, "Design and Analysis of a 4X4 Square Microstrip Array for Wind Profiling Radar", For East Journal of Electronics and Communication Engineering, Vol.2, No.3, pp.229-246, 2008.

4. Anitha V.R, S. Narayana Reddy, "Design of an 8X1 Square Microstrip Patch Antenna Array", International Journal of Electronics Engineering Research (IJEER), Vol.1, No.1, pp.71-77, 2009.

5. Anitha V.R, S. Narayana Reddy, Mohammed Ismaeel, "Design of a 4X4 Square Microstrip Planar Array" International Journal on Intelligent Electronic Systems, Vol.3, No.1, January 2009.

6. G.H.Reddy,Y.Venkatarami Reddy and S.N.Reddy, "The effect β in Kaiser window on the SNR of MST Radar signals", Asian Journal of Scientific Research 1(3), pp 203-212, March 2008.

7. G.H.Reddy, S.N.Reddy and A.S.R.Reddy, "Effect of windowing on SNR of MST radar Signals ", Far East journal of electronics and communications, Volume 2 ,Number 1, pp 89-98, April 2008.

8. K.Nagi Reddy ,S.Narayana Reddy , " Spectral estimation of non-stationary and unevenly sampled data ", Engineering Today Journal of Technological world, Volume X , Issue-3,pp 25-29, July-2008.

9. K.Nagi Reddy and S.Narayana Reddy, " Non-parametric method for power spectral estimation of signals in noise" , International journal of engineering & technology, volume 1, Number 1, pp 55-66 September 2008.

10. S. Satish Kumar, T.Ramashri   and Dr. S.Narayana Reddy "Image watermarking using Integer DCT and D-Sequence", International journal on Electronic & Electrical Engineering (IJEEE), Volume 1 No 1, pp. 109-113; November 2008-Jan'2009.

11. T.Ramasri and Narayana Reddy S., "Content based image-in –image watermarking using DCT and SVD," International Journal of Applied Engineering Research, Vol.4,No.2, February 2009.

12. T.Ramsri and S.Narayana Reddy, " Robust watermarking algorithm using D-sequences", International Journal of Wireless Networks and Communications(IJWNC),vol.1,No.1,pp 1-8,2009.

13. Venkatakishore,T.Ramashri and S.Narayana Reddy"SVD Based Robust Image watermarking using PSO", *International journal on Electronic & Electrical Engineering (IJEEE),*Volume 1 No 1, pp. 1 -6; November ' 2009 .

14. S.Satish Kumar,T.Ramasri and S.Narayana Reddy,"Image watermarking using Integer DCT and D-sequence".International journal on Electronic & Electrical Engineering, Vol.1,No.1,pp. 109-113,No.3,Nov 2009-Jan 2010.

15. K.Nagi Reddy,S.Narayana Reddy,ASR Reddy,"Parametric methods of spectral estimation Methods of spectral estimation of MST Radar data", IUP Journal of telecommunications, Vol.II,no.3,pp 55-74, August 2010.

16. P. Venkat Ramana and S. Narayana Reddy, "Adaptive Modulation and Transmitter Diversity using long Range Prediction for Flat Fading Mobile Radio Channels", International Journal of Advance in Communication Engineering, ISSN 0975-6094, Vol. 3(1), pp 1-7, January 2011.

17. K.Nagi Reddy,S.Narayana Reddy,ASR Reddy,"Significance of complex group delay functions in spectral estimation", Signal & Image processing; An international journal(SIPIJ) Vol.2, no.1, pp 114-133, March 2011.

18. K Raghunath,DVAbhinava Karthik, S Narayana Reddy and K Ramesh, "Development of calibration Scheme and software for Doppler lidar receiver" International Journal of Engineering Science and Technology**,** Vol. 3 No. 7,pp 5702-5708, July 2011.

18. Sreenivasan Baduru, Dr.S.N.REDDY, P.Jagadamba, Dr.P.Satyanarayana, "Noise Cancellation on ECG and Heart Rate Signals Using the Undecimated Wavelet Transform", International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622, Vol. 1, Issue 4, pp. 1962-1970. Vol. 1, Issue 4, pp. 1962-1970

20. P.Srinivasulu,P.Yasodha, A.Jayaraman, S.N.Reddy and S.Satyanarayana, " Simplified active array UHF Radar for atmospheric wind profiling: Initial results of an Experimental system ", Journal of atmosphere and oceanic technology , Volume 28,1436-1447, November 2011.

21. P.Srinivasulu, P.Yasodha, S.N.Reddy and P.Kamaraj, A. Jayaraman, "1280 Mhz Active Array Radar Wind Profiler for Lower Atmosphere: System Description and Data Validation", Journal of atmosphere and oceanic technology , Volume 29,1455-1470, October 2012.

22. ASR Reddy,K.Nagi Reddy and S.Narayana Reddy," Complex group delay function and its Derivative s for spectrum estimation of MST Radar signals", Journal of innovation in Electronics And Communications, January 2012, pp 158-162.

23. C.Chandrasekhar and S.Narayana Reddy,"" Design of high speed, low power 2D DWT for video Compression", Journal of Innovation in electronics and communications-special issue, vol.2(2), pp 33-36, jan.2012, ISSN 2249-9946.

24. P. Venkat Ramana and S. Narayana Reddy, "Improved Performance of UDP and TCP throughput in Mobile Wi-Fi Networks using 802.11n Standards" Journal of Innovation in Electronics and Communication, ISSN:2249-9946, Volume2(2), pp-197-198, January 2012.

25. K Raghunath, K Ramesh, and S Narayana Reddy, "Fabry Perot Interferometer as Solar Background noise Suppressor: Application to Day time lidar," Annals of Geophysics Vol.55, No.2, pp 215-222, 2012.

26. K Raghunath, K Ramesh, A Jayaraman and S Narayana Reddy, 'Development of Doppler lidar for tropospheric wind observations", Optical Engineering.

27. P.Venkat Ramana and S. Narayana Reddy, "Improved Performance of UDP and TCP throughput in Wi-Fi Networks for voice and data services in mobile communications with MIMO Systems" International Conference on Devices Circuits and Systems (ICDCS'12) ISBN 978-1-4577-1545-7 during 15 – 16 March, 2012, pp 144-148, at Karunya University, Coimbatore. Published in IEEE Explorer.

28. K.Raghunath and S Narayana Reddy," Performance simulations of Rayleigh Doppler lidar system for measuring middle atmosphere winds," Scientific Research and Essays, vol 7(28), pp 2440-2447, July 2012.

29. C.Chandrasekhar and S.Narayana Reddy," Dynamic power reduction in modified lifting scheme Based DWT for image processing", GJRE-F, Electrical and Electronics engineering,vol.12,issue 8 pp 17-27, July 2012, online: ISSN 2249-4596, print: ISSN 0975-5861.

30. C.Chandrasekhar and S.Narayana Reddy, "Performance analysis of modified lifting based DWT Architecture and FPGA implementation for speed and power", GJCST-F, Graphics & Vision, Vol.12,Issue 12,pp 41-50, Aug.2012.

31. P. Srinivasulu,P. Yasodha, S.N.Reddy, P. Kamaraj,T. N. Rao, S.Satyanarayana,and A.Jayaraman, "1280 MHz active array radar wind profiler for lower atmosphere: system description and data validation", Journal of atmospheric and oceanic technology, vol. 29, 1455-1470, October 2012.

32. C.Chandrasekhar and S.Narayana Reddy,"FPGA implementation of systolic array architecture and FPGA implementation for speed and power" International organization of scientific research journal of Engineering, pp 39-50,vol.2,issue 10,October 2012.

33. S.Mallikarjunaiah and S.Narayana reddy,"Design of LQR controller for flexible link manipulator", International Journal of advances in science and technology, vol.5,no.1,pp 1-9, 2012.

34. S.Mallikarjunaiah and S.Narayana reddy,"Study of the performance of ANFIS controller for flexible link manufulator", International Journal of Engineering research and applications, vol.3, issue.1,pp 1-6, Jan-Feb 2013.

35. S.Mallikarjunaiah and S.Narayana reddy,"Design of PID controller for flexible link manipulator", International Journal of Electrical Engineering & Technology,vol.4,issue.3,pp 141-155, May-June 2013.

36. S.Mallikarjunaiah and S.Narayana reddy," Performance Comparison of controllers for flexible link manipulator," International Journal of Electrical and Electronics and Instrumentation Engineering, Vol. 2, issue.7, pp 3552-3462, July 2013. ISSN : 2320-3765

37. P. Venkat Ramana and S. Narayana Reddy, "Enhanced Throughput and Energy Efficient Approach for Cognitive Radio using Cooperative Spectrum Sensing" 2013 Proceeding of ComNet CIIT & ITC, ISBN978-81-910691-6-3 (Elsevier) pp-275-280, 2013

38. C.Chandrasekhar, A. Viswanath and S.Narayana Reddy ,"FPGA Implementation of Image Fusion Technique Using DWT for Micro Air Vehicle Applications," International Journal of Engineering and Scientific Research, Vol.4, Issue-8, pp.307-315, ISSN: 2229-5518, August 2013

39. S.Venkataramana and S.Narayana Reddy," A Novel Method to Improve Resolution of Satellite Images Using DWT and Interpolation", International journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (An ISO 3297:2007 Certified Organization), Vol. 3, Issue 1, January 2014.

40.C.Chandrasekhar and S.Narayana Reddy ," Review of 2D/3D DWT-IDWT VLSI architectures for image compression", Journal of signal and imaging systems engineering", International Journal of Signal and Imaging System Engineering, Print ISSN: 1748-0698, Online ISSN: 1748-0701, 2014.

41. S.Narayana Reddy and Chandrasekhar, "Design and implementation of image fusion technique using DWT for Micro air vehicle", International Journal of Electronics and communication technology,ISSN:2230-7109(online)/2230-9543(print),vol.5,issue SPL-1, \ Jan-march 2014.

42. C.Chandrasekhar and S.Narayana Reddy, "Review of 2D/3D DWT-IDWT VLSI architectures for Image compression", Int. J. Signal and Imaging Systems Engineering, Vol. 7, No. 4, 2014 , Inderscience publishers.

43. P. Venkata Ramana and S. Narayana Reddy, "Cooperative Spectrum Sensing in Cognitive Radio Networks and Minimization of Error Probability using Optimal Decision Voting Rule," i-manager Journal on Digital Signal Processing, ISSN: 2321-7480, Vol.2, No.3, pp.31-36, September 2014.

45. P. Venkata Ramana and S. Narayana Reddy, "Cyclostationary Detection Based Spectrum Sensing in Cognitive Radio Networks," International Journal of Scientific & Engineering Research, ISSN:2229-5518, Vol.6, No.1, pp.1005-1010, January 2015. Indexing Thomson Reuters

46. P. Venkata Ramana and S. Narayana Reddy, "Efficient Cyclostationary Detection Based Spectrum Sensing in Cognitive Radio Networks," International Journal of Engineering Trends and Technology, ISSN:2231-5381, Vol.19, No.4, pp.195-200, January 2015.

47 . M.vijayalakshmi and S Narayana Reddy ,"Enhanced ber analysis and mitigation of ici in SFBC-OFDM systems", International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJECIERD); ISSN(P): 2249-684X; ISSN(E): 2249-7951 Vol. 4, Issue 4, Aug 2014, 55-70.

48. M.vijayalakshmi and S Narayana Reddy," Performance Analysis of ST, SF and STF in MIMO-OFDM Technique", IJCSI International Journal of Computer Science Issues, Vol. 10, Issue 2, No 2, March 2013 ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784.

49.MVijayalaxmi and S. Narayana Reddy,"Enhanced ber analysis in mimo-ofdm-stbc systems with MMSE equalisation and ml decoding", International Journal of Engineering & Science Research, ISSN 2277-2685,June 2014, Vol-4,Issue-6,ISBN No.338-349 .

50.Taj mahaboob and S.Narayana Reddy,"Resolution enhancement of satellite image usingDT-CWT and EPS ",International Journal of Science research,vol.3,issue.11,November 2014.

51. M.vijayalakshmi and S Narayana Reddy ,ber analysis and interference cancellation in SFBC-OFDM with timing offset " Journal International Journal of Applied Engineering Research (IJAER) accepted for publication.

National Journals :

1. S.N. Reddy and N.C.E. Reddy, "Skewed port device measurements using vector accuracy Enhancement techniques", IETE journal, Vol.40, No.6 Nov. 1994.

2. S.N.Reddy and N.C.E. Reddy, "Estimation of antenna efficiency using reflection measurements" IETE Technical Review, Vol. 16, No.2 March, 1999.

3. G. Srinivasulu and S.N.Redy, "Performance evaluation of superheated steam temperature control system based on tuning methods of analog controllers", IETE Journal of Research, Vol.49, No.6, November-December, 2003, PP 399-404.

4.. G. Srinivasulu and S.N.Reddy, "Performance comparison between single loop control and cascade control of superheated steam temperature system using analog controllers", journal of the Instrument society of India, Vol.No.33(4), 277-282, December 2003.

5. G. Sreenivasulu, and S.N.Reddy, "Robustness of analog and fuzzy logic controller for superheated steam temperature system of 500mW boiler, journal of the instrument society of India, September, 2006.

6.. T.Ramasri and Narayana Reddy S, "Content based image authentication using DWT and DCT", i-manager's journal on Electrical Engineering,Vol.2, pp.54-63, July-September, 2008.

7 K.Nagi Reddy ,S.Narayana Reddy and A.S.R. Reddy , "Adaptive techniques for spectral Estimation ", Engineering Today Journal of Technological world, Volume X , Issue-3, pp 1-5, March- 2008.

8. K.Nagi Reddy, A.S.R Reddy and S.Narayana Reddy," Comparative analysis of non-parametric methods of spectral estimation for MST radar signals", Research journal of engineering & Technology,Vol.4,Issue.4, October-December2011,pp 32-41.

9. K.Nagi Reddy, A.S.R Reddy and S.Narayana Reddy,"Complex Group Delay Function and its Derivatives for Spectrum Estimation of MST Radar signals," Journal of Innovation of Electronics & Communication, January 2012, pp.158-162.

10. S.Mallikarjunaiah and S.Narayana reddy,"Design of Adaptive Neuro-Fuzzy Inference System Controller for Flexible Link Manipulator," ACTA Eletrotechnica, Vol.54. No.2, 2013. Pp.91-98.

11. G.H.Reddy, Y.Venkatarami Reddy and S.N.Reddy, " Improved SNR of MST radar signals: Gaussian window Parameters", Technology Spectrum, JNT University, Hyderabad, 2008.

International Conferences:

1. S.N. Reddy, Sawant I.A. et al. " A Transmitter Module for the Indian MST Radar" International Conference on MST Radars, London, 1991.

2. S.N.Reddy and N.C.E.Reddy, " Determination of two port reciprocal device S-parameters using reflection measurements",4 th International conference on recent advances ion microwave technology,New Delhi,1993.

3. S.N.Reddy and N.C.E. Reddy, "Performance evaluation and error analysis of radar Comparator", IEEE International conference on instrumentation and measurements, Brussels, June 1996.

4. P. Sreenivasulu, P. Yasodha, S.N. Reddy and D. Narayana Rao, "Design and development of 1kW Solid-state power Amplifier and T/R switch for VHF Band Transmit-Receive module" ,International Radar symposium of India, held at IISC, Bangalore, 19-22 Dec, 2005.

5. S.N.Reddy, V.Rajani Kanth and P. Jagadamba, " Modeling of Atmospheric Radar Backscatter & Wind Velocity Estimation", 8th User Scientists international Workshop, NARL, GADANKI, 20-21 June 2006.

6. K. Nagi Reddy, S.Narayana Reddy, "Spectrum Estimation of Unevenly Sampled Non-stationary Data" International conference on Trends in Intelligent Electronic Systems, Sathyabama University, Chennai, 12-14 November, 2007.

7. P. Srinivasulu, P. Yasodha and S. Narayana Reddy, "Butler beam forming network for UHF wind profiling radar application", International Radar Symposium India (IRSI)-2007 organized by IEEE at Bangalore in December 2007.

8. Anitha V.R, S. Narayana Reddy, P. Srinivasulu, "Design of a 3X3 Square Microstrip Antenna Array,"Presented at the International Conference on Radio Science(ICRS), on Microstrip Antenna at Jodhpur, Feb.28, 2008.

9. Anitha V.R, S. Narayana Reddy, P. Srinivasulu, "Design and Analysis of a 4X4 Square Microstrip Planar Array," Presented at the International Conference on Electronics, Computer and Communication (ICECC-2008), on Antennas, University of Rajshahi, Bangladesh, June 28, 2008

10. K. Nagi Reddy, S.Narayana Reddy, "Non-Parametric Methods for Power Spectral Estimation of Signals in Noise" International Conference on Emerging Techniques in Computing, Electronics, Embedded systems and VLSI Design, Padmashri Dr. V.Vikhe Patil College of Engineering, Ahmednagar, Maharastra during 20-21 March 2008.

11. P. Srinivasulu, P. Yasodha, T. Rajendra Prasad, T. N. Rao and S.Narayana Reddy, "Development of 1280 MHz Active Array Radar at NARL", International Radar Symposium India-2009, organized by IEEE in Bangalore, December 2009.

12. P. Srinivasulu, P. Yasodha, S. N. Reddy, P. Kamaraj, K. Jayaraj, J. Raghavendra and A. Triveni, "Transmit-Receive Modules for 1280 MHz Simplified Active Array Radar", International Symposium on Microwaves-2010 organized by IEEE at Bangalore, December 2010.

13. Performance of a lidar system during daytime observations, K Raghunath, Harikrishnan,

A Jayaraman and S Narayana Reddy, Proceedings of Conference on Aerosols and Clouds, Climate Change Perspectives, Vol. 19, No 1 &2 March 2010, Darjeeling.

14. Doppler lidar for tropospheric wind observations**,** K Raghunath, K Ramesh, A Jayaraman and S Narayana Reddy, Conference Digest of XXXV OSI Symposium of International Conference on Contemporary Trends in Optics and Optoelectronics, 17-19 January, 2011, Thiruvananthapuram.

15. P. Venkat Ramana and S. Narayana Reddy, "Adaptive Modulation and Transmitter Diversity using long Range Prediction for Flat Fading Mobile Radio Channels", International Conference on Communication and Signal Processing (ICCOS 2011) at Karunya University, Coimbatore, Vol. 3(1), pp 1-6, 17-18 March 2011.

16. Atmospheric wind observations with Laser Radar**,** K Raghunath, K Ramesh, A Jayaraman and S Narayana Reddy, Accepted at 8th International Radar Symposium India held during 1-4, Dec 2011 at Bangalore.

17. P. Srinivasulu, P. Yasodha, P. Kamaraj, T. N. Rao, S. N. Reddy and A.Jayaraman, "Development and Validation of L-band Active Array Lower Atmospheric Radar Wind Profilers at NARL", Presented at International Workshop on Technical and scientific aspects of ST/MST Radars (MST-13),Germany, March 2012.

18. P. Venkat Ramana and S. Narayana Reddy, "Enhanced Throughput and Energy Efficient Approach for Cognitive Radio using Cooperative Spectrum Sensing" International Conference on Computational Intelligence and Information Technology- CIIT2013, pp-20-25, October 2013.

19. C.Chandrasekhar and S.Narayana reddy, "Design of 3D-DWT architecture using systolic array based high speed 1D-DWT",Conference on computer science & Computational Mathematics (CCSCM 2012) pp 88-96, 9-10 Feb 2012,Melaka, Malaysia.

20. Chandrasekhar and S.Narayana Reddy, "design and implementation of image fusion technique using DWT for Micro air vehicle", International Conference on Advances in computer Science, Electronics and communication technologies, Bangkok , Thailand , 25th Jan, 2014.

21. P.Venkata ramana and S.Narayana Reddy, "Spectrum Sensing in Cognitive Radio Networks Using Blind Approach Cyclostationary Detection", International Conference on Telecommunication Technology & Management (ICTTM-2015), IITD, New Delhi, ISBN:97809926880053, pp.3, April 2015.

National Conferences :

1. S.N. Reddy, Basu A.K. et al. "Determination of 53 MHz pulsed radar transmitter", National Symposium on DC and RF Power Sources in Research and Industry, BARC, BOMBAY,1990.

2. S.N. Reddy "Wireless standards for broadband Communications" National Conference of Role of Engineers in e-Governance, Tirupati, Dec-2003.

3. A.S.R. Reddy, G.Harinatha Reddy and S.N.Reddy, "Sinc window function used for MST Radar

signal processing", National conference on Role of Engineers in e-Governance,S.V.University, Tirupati, Dec- 2003.

4. S. Varadarajan. K.Jithendra Reddy and S.N.Reddy, "e-Governance-Western Trends, Eastern needs". National conference on Role of Engineers in e-Governance,   Tirupati, Dec.-2003.

5. S.N.Reddy, V. Rajani Kanth, P. Jagadamba and S.Leela Lakshmi, " Algebraic Approach for detection of Radar Wind Profile", 8th User Scientists Workshop, NARL, GADANKI, 20-21 June 2006.

6. K. Nagi Reddy, P. Jagadambha, S.Narayana Reddy, "Design and Implementation of FIR filters using Windowing techniques". National conference on Radar Technology & Signal processing, S.V.University, Tirupati, 24-25 July, 2006.

7.   G.H.Reddy ,S.Narayana Reddy, Y. Venkatarami Reddy and A.S.R.Reddy, "Improved SNR of MST radar signals,:Dolph- Chebyshev Window parameters", 3rd National conference on signal processing and communications(NCSC-2007), RGM College of Engineering & Technology, Nandyal (India), Feb-2007.

8. K. Nagi Reddy, S.Narayana Reddy, ASR Reddy, "Adaptive techniques for spectrum   Estimation". National Conference on emerging Trends in ECE, JNT.University College of Engineering, Ananthapur, 23 June 2007.

9. K. Nagi Reddy, S.Narayana Reddy, "Non-Parametric Methods for power spectrum estimation", National Conference on emerging Trends in Mechatronics & Instrumentation,. S.V.University, Tirupati-29-30 June 2007.

10 K. Nagi Reddy, S.Narayana Reddy, "Parametric methods for spectral estimation" National conference on emerging Trends in Mechatronics & Instrumentation, S.V.University, Tirupati, 29-30 June, 2007.

11.K. Nagi Reddy, S.Narayana Reddy, P. Mohanaiah "Combined Geometric and Algebraic Averaging for power Spectral Estimation", National Conference on Signal Processing & Communication systems, 20-21 February 2008, Guntur, A.P. India

12.S.Satish Kumar,T.Ramasri and S.Narayana Reddy, " Content based image watermarking using DWT and DCT", National conference on recent trends in Electronics and communications Engineering and Information Technology,organized by CMR Instituteof Technology,Bangalore, 28-29th August 2008.

13. S.Satish Kumar,T.Ramasri and S.Narayana Reddy, " Content based image watermarking using DCTand SVD", National conference on recent trends in Electronics and communications Engineering and Information Technology,organized by CMR Instituteof Technology, Bangolore, 28-29th August 2008.

14. P. Srinivasulu, P. Yasodha and S. Narayana Reddy, "Development of planar micro strip array and multi-beam forming network for 1280 MHz pulse Doppler radar", National work shop on Design of Antenna and Radar Systems (DARS-2009), organized by ISTRAC/ISRO, Bangalore, February 2009.

15.T.Ramsri and S.Narayana Reddy, " Robust watermarking algorithm using D-sequences", National Conference on data mining ,organized by Department of Computer Science,S.V.University, Tirupati,1-2 April2009.

16. T.Ramasri and S.Narayana Reddy, " Correlation based image watermarking using Decimal Sequences", National conference on Emerging trends in Engineering Technology, organized by Shirdi Sai Engineering college, Bangalore, 29-30th, April 2009.

17. S Satish Kumar,T.Ramasri and S.Narayana Reddy, " Image watermarking algorithm Using Integer DCT and D-sequence",National workshop on signal processing and applications, organized by IETE centre & Department of EEE, SVU college of Engineering,Tirupati, 7-8th August, 2009.

18. Ch Venkata Kishore,,T.Ramasri and S.Narayana Reddy, " SVD based watermarking   using PSO",National workshop on signal processing and applications,organized by IETE centre & Department of EEE, SVU college of Engineering,Tirupati, 7-8th August, 2009.

19. P. Srinivasulu, P. Yasodha, P. Kamaraj, S. N. Reddy, T. N. Rao, and A.Jayaraman, "Development of Lower Atmospheric Wind Profiling Radars at NARL" Presented at National Space Science Symposium, NSSS-2012, organized by S. V. University, February, 2012 (won the second best paper award)

20. P. Venkat Ramana and S. Narayana Reddy, "Cooperative Spectrum Sensing using Energy Detection in Cognitive Radio Networks" All India Seminar on Telecommunication Switching Systems and Networks, The Institute of Engineers (India), Visakhapatnam, pp.152-156, January 2014.

21. G.H.Reddy, Y. Venkatarami Reddy and S.N.Reddy, "The Effect of β in Kaiser Window on the SNR of MST Radar Signals," National Conference on Radar Technology and Signal Processing Techniques, S.V.University, Tirupati, July-2006.