

CURRICULUM VITAE

1. Name : **PABBISSETTI SATHYANARAYANA**
2. Date of Birth : 6th April, 1954,
3. Present work : Working as Professor in ECE
School of Engg. And Technology
SPMVV Tirupati
- Retired Professor from the Department of
Electronics & Communication Engineering
SV University College of Engineering
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5. Indian Passport No. : F1053703
6. Nationality : Indian
7. Marital Status : Married Wife and 2 Children both Sons

II. Academic Qualifications

Degree with Specialization	Institution/University	Year of awarding	Class awarded
Post Doctoral Fellow	Department of Electrical & Computer Engineering Concordia University, Montreal, Canada	1988 to 1990	
Ph. D (Digital Signal Processing, Electronics and Comm. Engg.)	S.V.U. College of Engg. Sri Venkateswara University Tirupati, India	1987	I Class with Distinction
ME. (Instrumentation and Control System)	S.V.U. College of Engg. Sri Venkateswara University Tirupati, India	1978	I Class
B.E. (Electronics & Communication Engg.)	S.V.U. College of Engg. Sri Venkateswara University Tirupati, India	1976	I Class

Teaching Experience

Designation	From	To	Institution
Professor	29-07-1999	30-04-2014	Dept. of ECE, SVU College of Engg. (till Superannuation)
	09-05-2014	14-4-2019	AITS Tirupati
	15-04-2019	Till today	Dept. Of ECE , SOET, SPOMVV Tirupati
Associate Prof.	29-07-1991	29-07-1999	SVU College of Engg.
Asst. Professor	29-07-1979	29-07-1991	SVU College of Engg.
Visiting Faculty	30-05-2004	30-04-2007	Aerospace Engg. Universiti Sains Malaysia Malaysia

III. a. Courses taught in SOET

: Digital Image Processing
Radar Engineering

a1. courses taught in AITS

: Radar Systems
Digital Image Processing
Electronic Measurements & Instrumentation
Analog Communication

b. Courses taught in Sri Venkateswara University Tirupati, India

: Graduate Programme :
Information theory and coding
Digital Signal Processing
Digital Image processing
Communication Engineering
Electronic Instrumentation & Measurements
Microprocessor Based System Design
and allied subjects.

Under graduate Programme.

Microware Techniques
Digital Signal Processing
Radar Engineering
Electronic instrumentation
Analog and digital Electronic Circuits
Communication Engineering.
Transducer Technology
Electronic Instrumentation
Microprocessor Applications
Advanced Communication Systems
and allied subjects.

**b. Courses taught in University
Sains Malaysia, Malaysia**

- : **ESA 254** (Signals Systems and Digital Electronics)
ESA 484 (Satellite Communication System)
ESA 381 (Space Craft Sub System Elements)
ESA251 (Theory of Control Systems)

IV. Research:

a. Visit to other universities out side India: i. Post doctoral fello,

Concordia University , Montreal, Canada
From Sep. 1988 to May 1990.

ii. Visiting Faculty Universiti Sains
Malaysia, From June 2004 to May 2007

iii. Visited Washington University in Saint
Louis, Saint Louis, MO, USA for 3
to study the research activity going

weeks
on there

from 10th April 2008 to 1st May 2008.

b. Research Schemes

(discrete
and allied
applied to

- : **i.** USM short term grant on the project entitled
Image data compression using DCT
cosine transform) and interpolation
Topics in digital image processing
satellite imaging

Start of project :15- 04- 2005

End of project : 14- 04- 2007

Three papers are presented under this work in the
international conferences

ii. From September 1988 to May 1990, worked
as Post-Doctoral Fellow in the Dept. of Electrical
and Computer Engg., Concordia University,
Montreal Canada.

Job Assignment includes conduct of research in
the field of one and multidimensional digital
signal processing and giving lectures to under
graduate and graduate students

iii. Department of Science and technology (DST)
project on “ Implementation interpolation and
allied topics of digital filtering, had been
handled during sep. 1986 to Aug. 1988

iv. Worked as member Networks scheme of
UGC project for establishing signal Processing
Laboratory.

v. Continuing research work in signal processing
and image processing all these 28 years

**b. Research Facilities offered
in the college**

- : **i.** Full fledged digital signal processing
and Microwaves and Communication Engg.

Labs. had been established in India
ii. Manuals for Micro-controller laboratory is prepared and experiments are set up and tested

c. Research Publications and Papers presented in conferences

: List enclosed in appendix 1.

d. Guidance Rendered

: i. 8 Ph. D's awarded under my guidance
ii. 3 pupil are working now
Supervised Final year projects about 50,
Master level about 25

V. Academic & Professional Advancement

a. Professional bodies member ship

: Former member of IEEE USA.
Member of ISTE India

b. Member ship of various bodies

: i. Member of Aerospace Engineering School Board for three years in USM, Malaysia
ii. Member of Materials & mineral resources Engineering School Board for three years in USM, Malaysia
iii. Chairman Board of Studies for Electronics and communication Engineering of SVU college of Engineering
iv. Member, SVU Teachers Association

VI. Other activities

: Worked as convener for B.Tech (FDH) Programme, which includes arrangement Class work , examination schedules and Associated works.
In-charge Academic schedules and Time table of the Dept.
Worked as Vice President of the Dept. students association, which includes Guiding students for conduct of various activities
Worked as additional Chief Superintendent of College examination cell.
Member of Department development. Committee.
Worked as member and also chairman of NBA committee for the accreditation of Engineering colleges.
Worked as member of AICTE inspection committee for starting new Engineering Colleges and enhancement of seats.

Computer Knowledge

: Touch with MS office, Internet, Fortran and C-language. Matlab

No. Of Ph.Ds awarded under my supervision : 8

List:

1. Dr. M. Padmaja, "Dynamic Power control methods for image transmission over wireless channels to minimize mean square error", Oct. 2013.
2. Dr. P. Jagadamba, "Performance of variable windowing techniques in improving signal to noise ratio (SNR) of MST radar atmospheric signals", Aug. 2013.
3. Dr. P. Mohanayya, "Tumor detection techniques using discrete wave let transform and grey level co-occurrence matrix with neuro fuzzy classifier, Feb 2014
4. Dr. S. Murali Mohan " LSI implementation of discrete wavelet transforms and neural networks architecture for image compression with high speed and power optimization" June 2017
5. Dr. T. Rajendra Prasad " A new technique of phased array antenna characterization of digital receiver and transmitter controller for MST radar" August 2017
6. Dr. I Kullayamma "Digital image watermarking based on gradient direction quantization and denoising using bilateral filters, guided image filter, wavelet and contourlet transforms along with its applications" September 2017
7. Dr.S Swarnalata, "Comparative study of denoising of corrupted images by means of wavelets, contour wavelets and block matcing transforms through bi-shrink filters", Dec 2017
8. Dr C N Sujatha, "Robust hybrid water marking schemes for color image & video authentication and copy right protection using DWT-DCT-SVD" March 2018

Appendix- I

Publications and papers presented in National & International conferences

a. List of Papers published in National/International Journals

1. Kullayamma, & P. Sathyanarayana, "Kullayamma, & P. Sathyanarayana, "An improved hybrid color image watermarking under various attacks",IJARCCE, Vol. 4 Issue 3 March 2015
2. I. Kullayamma, & P. Sathyanarayana, "Robust image water marking based on gradient direction quantization used for CTS of Bank", IJGIP, Vol. 5, Issue 2 May 2015.
- 3.C N Sujatha & P. Satyanarayna, "Analysis of robustness of hybrid video water marking against multiple attacks," IJCA, Vol. 1 May 2015
- 4I. Kullayamma, & P. Sathyanarayana, "A robust image water marking based on gradient vector quantization and denoising using contour let transform", IJERA VI. 4 Issue 9 Sep. 2014

5. performance analysis of neural network architecture combined with dwt for image compression, S. murali mohan and P. Sathyanarayana, International Journal of Computer applications,(IJCA), Vol. 58, Number 11, 2012, 10.5120/9325-3629
6. FPGA Implementation of Hybrid Architecture for Image Compression Optimized for Low Power and High Speed applications, Mr. Murali Mohan. S, P. Satyanarayana, International journal of Science & and Engineering Reasearch, Vol. 4, May.2013 ISSN 2229-5518
7. Design and Implementation of 3-D DWT for Video processing applications International Journal of Advanced Electrical and Electronics Engineering, (IJAEED), P. Mohanaiah, P. Sathyanarayana, A. S. Ram Kumar Reddy & A. Vijayalakshmi ISSN (Print): 2278-8948, Volume-1, Issue-3, 2012
8. “ Speech formant frequency estimation techniques”, P. Mohanaiah, R. lavanya and P. Sathyanarayana, Journal of innovation in electronics and communication- mspecial Issue, Vol. 22, Jan 2012 @ ISSN 2249-9946, pp. 306-308. [2]
9. "Image texture feature extraction using GLCM approach", P. Mohanaiah, P. Sathyanarayana and L. GuruKumar, International Journal of scientific & Research Publications, vol. 3. Issue 5, p p: 1-5, ISSN: 2250-3153, May 2013.
10. P. Mohanaiah, P. Sathyanarayana “Detection of tumour using Grey Level Co-Occurrence Matrix and Lifting based DWT with Radial Basis Function” International Journal of Engineering Research & Technology (IJERT) Vol.2, Issue 6 p p: 1677-1683, June 2013, ISSN : 2278-0181
11. “Binary Phase Shift Keying Modulation Based Balanced Power Adaptation Transmission of Images Over Wireless Channels”, Manuscript ID: 10812-02, M. Padmaja, P. Satyanarayana, K. Prasuna, IJSEI (International Journal of Science and Engineering Investigations) accepted for publication.
12. “Performance Analysis of Neural Network Architecture Combined with DWT for Image Compression”, P. Sathyanarayana and IJCA(International Journal of Computer applications, Digital Library URI :<http://www.ijcaonline.org/archives/volume58/number11/9325-3629>, ISBN : 973-93-80870-41-7International Journal of Wireless Networks and Communications.
13. “Power Control Method for Image Transmission using Various Modulation Techniques”,M. Padmaja, Dr. P. Satyanarayana and K. Prasuna, International Journal of Wireless Networks and Communications. Volume 1, Number 2 (2009), pp. 103 – 110, <http://www.ripublication.com/ijwnc.htm>
14. Dynamic Power Allocation For Transmission of 2-D Signals Over Wireless Channels”, M Padmaja, P Satyanarayana, & K.Prasuna”, International Journal of Computer Science & Communication, Vol. 1, No. 1, January-June 2010, pp. 239-243Canadian Journal on Electrical & Electronics Engineering Vol. 1, No. 1, February 2010
15. “Performance Evaluation of Power Allocation Methods for Image Transmission over Wireless Channels” M Padmaja, P Satyanarayana, and K Prasuna, Canadian Journal on Electrical & Electronics Engineering Vol. 1, No. 1, February 2010.

- 16 “The effect of Tukey window in improving the signal to noise ratio (SNR) of atmospheric signals”, P. jagadamba and P .Sathyanaryana, International journal of Electronics, Electrical and communication engineering Vol. 3(2), 2011, pp. 155-161.
17. “Signal to noise ratio(SNR) improvementof the atmospheric signals using variable windows”, Signal and Image processing: An international Journal (SIPIJ), Vol. 3, No. 5, Oct. 2012 ISSN 0976-710
18. “The effect of window parameter (gama) in Gaussian window on the processing of atmospheric signals”, P. jagadamba and P .Sathyanaryana, , Journal of Innovation in Electronics and Communication – Special issue Vol. 2(2), Jan. 2012 @ISSN: 2249-9946, pp.101-103
19. The effect of window parameter in Kaiser and Gaussian windows on the processing of atmospheric signals”, P. jagadamba and P .Sathyanaryana, , Journal of Innovation in Electronics and Communication –Vol. 2(2), July-December. 2012 @ISSN 2249-9946
20. “The effect of window parameter (α) in Dolph-chebyshev window on the processing of atmospheric signals’, P. Jagadamba and P. Sathyanarayana, International Journal of Engineering Research and applications(IJERA),Issue 2, Vol. 1, pp.109-116 ISSN:2248-9622 Jan.- Jun. 2012
21. ”Interpolation of 2-D signals”, IEEE Transactions on Circuits and Systems, USA, vol.37, No.5, pp.623- 625, May 1990.
- 22.” Minimal multiplier realisation of 1-D all pass digital filters, “IEEE Trans. on Circuits and Systems, USA, vol. 37, No2, pp. 299-302, 1990
23. “Realisation of separable first and second order 2-D all pass digital filters,” IEEE Trans. on Circuits and Systems, USA, vol. 36, No.8, pp. 1146-1147, 1989.
24. “CAS-CAS Transform for 2-D signals: A few applications,” Circuits Systems and Signal Processing, vol.10, No.2, pp. 163-173, 1991.
25. “The stabilisation of two-dimensional non symmetric half plane recursive filters via discrete Hilbert transforms,” International journal of circuit Theory and applications, vol.19, pp. 1-8, 1991.
26. “Signal scaling in Cascade digital filters,” Circuits Systems and Signal processing, vol. 8, No.4, pp. 421-426, 1989.
27. “Fast interpolation algorithm using FFT,” electronics letter, IEE UK, vol.22, No.4, pp. 185-187, Feb. 1986.
28. “Fast implementation of 2-D filters,” J. IETE vol. 31, No. 6, pp. 192-194, Nov- Dec 1985.
29. “IC Electro Anaesthesia Equipment for veterinary surgery,” J.IETE vol.29, No.4, pp.176-178, 1985.

b. List of Papers presented in National/International Conferences

30. P. Mohanaiah, Dr. P. Sathyanarayana, "Design and Implementation of 3-D Lifting based Discrete Wavelet Transform" International Conference on Advanced Computer Science, Communication & Information Technology(ICACSIT) conducted by IRD India at Coimbatore 20th & 21st October 2012.
31. P. Mohanaiah, Dr. P. Sathyanarayana, L. GuruKumar, "Image Texture Feature Extraction Using GLCM Approach" 2nd International conference on Communications and Signal Processing (ICCSP-2013), by QIS College of Engineering, Ongole. 01st- 03rd April-2013.
32. "Decimative spectrum estimation method for high resolution radar parameter estimates", AP Science Congress held in Tirupati, Nov. 2009.
11. "Digital receiver for atmospheric radar", AP Science Congress held in Tirupati, Nov. 2009.
33. "Balancing push and pull for efficient information discovery in large-scale sensor networks", National conference on recent trends in Electronics communication Engg. And information technology, at CMR Institute of Technology, Bangalore, Aug., 2008.
34. "Digital image compression and decompression using three different transforms and comparison of their performance", International conference on Man-machine systems (ICoMMS2006), at Langkawi, 15-16 September 2006.
35. "Genetic algorithm application in aircraft weight optimisation", 14th Annual (international) Mechanical Engineering conference, May 2006, Isfahan University of Technology, Iran
36. "A new approach to Synthetic aperture Radar design", International space conference on cutting edge space technologies, 3-5 December 2005, Langkawi, Malaysia
37. "Data compression techniques using CAS-CAS transform applied to remotely piloted vehicle(RPV) digital images before transmission to ground station", 9th international conference on mechatronics technology 2005, 5-8 December 2005, Kuala Lumpur, Malaysia.
38. "Position movement and speed control of stepper motor with digital controller", 9th international conference on mechatronics technology 2005, 5-8 December 2005, Kuala Lumpur, Malaysia.
39. "Neural network development for fuel-used optimization of civil transport aircraft", 9th international conference on mechatronics technology 2005, 5-8 December 2005, Kuala Lumpur, Malaysia.
40. "Image data compression techniques using discrete Hartley type transform and FFTs: A comparison", International conference on Robotics, vision, information and signal processing, 21-22 July 2005 Pinang, Malaysia
41. "Data link functions and attributes of an unmanned aerial vehicle(UAV) system using both ground station and small satellite", 5th Symposium on small satellites for earth observation, April 4-8, 2005 Berlin, Germany .

42. "On the radar design of unmanned aerial vehicle (UAV) using synthetic aperture radar(SAR)", International conference on mechatronics, ICOM05 10-12 may 2005 , Kuala Lumpur, Malaysia.
43. "Total error in UAV navigation and target –location Measurements using differential GPS", International Conference on Mechatronics, ICOM05, 10-12 May 2005 Kuala Lumpur, Malaysia
44. " Data compression Techniques applied to digital image processing", Natioanal aersospace conference, 7-10 Sep. 2004, USM Engg. Campus, Pinang, Malaysia
45. "Interpolation algorithm using Walsh-Hadamard and Discrete Fourier /Hartley transforms," Presented at 33rd Mid West Symposium Calgary, Canada, 12-14Aug.1990.
46. "A new scaling procedure for cascade digital filters," Presented at IEEE conference on ASSP at Dallas, USA April 1987.