#### Dr. G. Umamaheswara Reddy

Professor

Department of Electronics and Communication Engineering Sri Venkateswara University College of Engineering Sri Venkateswara University, Tirupati - 517502 Andhra Pradesh, India

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#### **Career Objective**

To work as a Professor of Electronics and Communication Engineering, supervise quality postgraduate theses, and make a difference in students' lives.

#### Research Interest

Signal / Image Denoising, System Identification, Spectral Estimation, Biomedical Signal Processing.

#### Education

**Ph.D.:** November 2013, Title of the Thesis: Denoising of ECG Signals Using Wavelet Based Threshold Methods with Grey Incidence Degree, University: Sri Venkateswara University, Tirupati- 517 502, India.

**M. Tech**: March 1995, Obtained in First Class with distinction, Sponsor: UGC (GATE score). University: Sri Venkateswara University, Tirupati- 517 502, India.

**B. Tech**: December 1992, Obtained in First Class with distinction.

University: Sri Venkateswara University, Tirupati- 517 502, India.

Date of Birth: June 1, 1970

#### **Teaching Experience:**

S. No.	Designation / Stage	Qualifying Service	
		From	То
(i)	Lecturer Rs. 8000-275-13500	05-07-1996	12-08-1999
	(NBKR Institute of Science & Technology, Vidynagar)		
(ii)	Lecturer Rs. 8000-275-13500	13-08-1999	28-10-1999
	(Srikalahasteeswara Institute of Technology,		
	Srikalahasti)		
(iii)	Assistant Professor Rs. 8000-275-13500	29-10-1999	28-09-2000
	(Srikalahasteeswara Institute of Technology,		
	Srikalahasti)		
(iv)	Associate Professor Rs. 12000-420-18300	29-09-2000	03-07-2007
	(Srikalahasteeswara Institute of Technology,		
	Srikalahasti)		
(v)	Associate Professor Rs.15600-39100 + AGP Rs.8000	03-07-2007	30-06-2010
	(S.V. University, Tirupati – 517 502)		
(vi)	Associate Professor Rs.37400-67000 + AGP Rs.9000	01-07-2010	22-11-2013
	(S.V. University, Tirupati – 517 502)		

(vii)	Professor Rs.37400-67000 + AGP Rs.10000	23-11-2013	Till date
	(S.V. University, Tirupati – 517 502)		

Number of Publications in referred journals : 14

Number of Presentations : 04

No. of Ph. D. Thesis under supervision : 05

No. of M. Tech Dissertations guided : 16

No. of Conferences/ Seminars/ Workshops Organized : 16

No. of Conferences/ Seminars/ Workshops Attended : 25

### List of Papers published in International Journals

- G. Umamaheswara Reddy, Prof. M. Muralidhar, Dr. S. Varadarajan, "ECG De-Noising using improved thresholding based on Wavelet transforms", International Journal of Computer science and Network security (IJCSNS), Vol.9, No.9, pp. 221-225, September 2009.
- Surya Sri Vidya Balantrapu, G. Umamaheswara Reddy, "Gaussian Noise Suppression in MRI images using wavelet based approach", International Journal on Electronic and Electrical Engineering (IJEEE) ISSN 0974-2042, vol.10, no.1, pp. 6-12, 2010.
- G. Umamaheswara Reddy, Prof. M. Muralidhar, "Wavelet-based De-Noising of ECG Signal by Customized Thresholding", International Journal on Electronic and Electrical Engineering (IJEEE), vol.11, No.1, pp.1-7, 2010, ISSN 0974-2042.
- V. Supraja, G. Umamaheswara Reddy, "Comparative Analysis of Heart Rate Variability for ECG Groups Based on Correlation Dimension", International Journal of Applied Engineering Research, vol. 5, no. 21-22 pp. 3481-3489, 2010, ISSN: 0973-4562.
- Suresh MCV, G. Umamaheswara Reddy, "YCocg Color Image Edge detection", Global Journal Engineering and Applied Sciences (GJEAS), vol.1 (3), pp. 100-103, 2011, ISSN: 2249-2631(online): 2249-2623(Print).
- Naga Sravanthi Kota, G. Umamaheswara Reddy, "Fusion Based Gaussian noise Removal in the Images Using Curvelets and Wavelets with Gaussian Filter", International Journal of Image Processing (IJIP), vol.5, no.4, pp.456-458, 2011, ISSN: 1985-2304.
- T. Dhanaraj, G Umamaheswara Reddy, "Removal of Baseline Wandering in ECG Signals using Sigular Value Decomposition", International Journal of Engineering Research and Applications (IJERA), vol. 2, Issue 1, pp. 379-382, Jan-Feb 2012, ISSN: 2248-9622.
- G. Umamaheswara Reddy, Prof. M. Muralidhar, "Removal of Electrode Motion Artifact in

- ECG Signals using Wavelet Based Threshold methods with Grey Incidence Degree', International Journal of Electrical and Electronics Engineering (IJEEE), vol.1, no.4, pp.1-8, 2012, ISSN (PRINT): 2231 5284.
- P.Bhanu Priya, G. Umamaheswara Reddy, "Adaptive Document Image Binarization for Degraded Document Images", International Journal of Advanced Technology and Innovative Research, Vol. 07, Issue no.01, January-2015, pp.0140-0144 ISSN 2348-2370.
- P. Keerthi Priya, Dr. G.Umamaheswara Reddy, "MATLAB Based GUI for Arrhythmia Detection Using Wavelet Transform", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 4, Issue no.2, pp. 807-816, February 2015 ISSN (Print): 2320 – 3765, ISSN (Online): 2278 – 8875.
- B. Madan Mohan, Dr. G. Umamaheswara Reddy, "Atrial Electrical Action Finding by Using ECG Lead Signals", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 04, Issue no. 10, pp. 8380-8385, October 2015, ISSN (Print): 2320 – 3765, ISSN (Online): 2278 – 8875.
- Cheruvu Mahammad Ibraheem, Dr.G.Umamaheswara Reddy, "Content Based Image Retrieval using HSV Color, Shape and GLCM Texture", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 4, Issue no. 10, pp. 378 -383 October 2015, ISSN (Online) 2278-1021, ISSN (Print) 2319 5940.
- Seella Krishnaveni, Dr. G. Umamaheswara Reddy, "Fast Weighted Guided Image Filter", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 4, Issue no. 10, pp. 263 -265, October 2015, ISSN (Online) 2278-1021, ISSN (Print) 2319 5940

### List of Papers presented in International Conferences/Seminars

G. Umamaheswara Reddy, Dr. S. Varadarajan, Prof. M. Muralidhar, "Denoising of ECG Signal using Wavelets with Improved thresholding", Proceedings of the International Conference on Signals, Systems and Communication (ICSSC), Organized by Anna University Chennai, Chennai- 600 025, pp. 43-48, December 21-23, 2009.

### List of Papers presented in National Conferences / Seminars

- Suresh MCV, G. Umamaheswara Reddy, "Image Edge detection by RGB Method", Proceedings of the National Conference on Emerging Trends in Communications & Signal Processing Techniques (Sanketa-2012), vol.2(2), 21<sup>st</sup> January 2012, pp.258-262, Jointly organized by Sri Venkateswara University Tirupati- 517502 & IETE - Tirupati Centre, ISSN: 2249-9946.
- N Muni Kumar, G. Umamaheswara Reddy, "Application of Cloud Storage in Digital Library",
   Proceedings of the National Conference on Recent Advances in Soft-computing and

Knowledge Discovery Techniques and Applications, January 19-21, 2012, organized by Sri Venkateswara University Tirupati- 517502, Published by Ikons Books, New Delhi, India, pp. 249-252, ISBN: 978-93-81177-13-6.

N. Midhun Reddy, G. Umamaheswara Reddy, "Design of Low Power, High Speed Reconfigurable FFT", Proceedings of the 2013 National conference on Innovations in IT & Engineering (IITE2K13), 20<sup>th</sup> and 22<sup>nd</sup> April, 2013, organized by department of Computer Science, Sri Venkateswara University Tirupati- 517502, Published by Excellent publishing House, New Delhi, India, pp. 290-294, 2012, ISBN: 978-93-83083-19-0.

### List of Projects Handled:

Title	Funding Agency	Date of Commencement
Aakash Project	NME-ICT, MHRD & IIT Bombay	11 <sup>th</sup> Nov., 2012

# · Labs and facilities Established in the Department

- 1. ECE Seminar Hall
- 2. Microprocessors Laboratory

#### Administrative Positions Held:

- 1. Head, Department of Electronics and Communication Engineering at Srikalahasteeswara Institute of Technology, Srikalahasti 517 640 from 01<sup>st</sup> October, 2000 to 24<sup>th</sup> August, 2004.
- 2. Additional Chief Superintendent of Exams at Sri Venkateswara University College of Engineering, Tirupati-517502 from 24-07- 2009 to 08-12-2011.
- 3. Executive Council Member, Sri Venkateswara University Teachers Association (SVUTA), Tirupati 517 502 from 01<sup>st</sup> May, 2010 to 31<sup>st</sup> July, 2014.
- 4. Dy. Warden (Maintenance), S.V. University College of Engineering Men's Hostels, Tirupati from 26<sup>th</sup> June, 2014 to 31<sup>st</sup> May, 2016.
- 5. Coordinator, Student Level National Conference SIGMOID 2K12, SIGMOID 2K15, and SIGMOID 2K16.
- 6. Coordinator, Institute-Industry Interaction Cell (I-I-I-C), TEQIP- SVUCE from 01<sup>st</sup> May, 2013 to till date.
- 7. Executive Member, The Institution of Engineers (India), Tirupati Local Centre from 01<sup>st</sup> November, 2014 to 31<sup>st</sup> October, 2016.

# Membership of Professional bodies:

- 1. Life member of Indian Society for Technical Education (ISTE) LM -28821
- 2. Life member of Biomedical Engineering Society of India (BMESI) L-814

3. Member of The Institution of Engineers (India) (IEI) M- 135507-9

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# Aakash Project

The National Mission on Education using ICT (NME-ICT) (MHRD, Government of India) envisages that Aakash tablets should be deployed for empowering our students and teachers. The first project under this scheme, aims at deploying 1, 00,000 tablets in the engineering colleges of the country, for their effective use in higher education. So far 282 tablets will be issued at *no cost to this Institute*. Any development of contents and applications done by the students and faculty will be released in Open Source. The documentation and testing is expected to meet global standards of quality. It is expected that participation in this project will enhance Research and Development activities in this area, in the entire Institute. More number of Aakash tablets may be received in future.

Under this project, IIT Bombay plans to deploy the Aakash tablets with two objectives. The first is to test and enhance the effectiveness of these tablets for use in class rooms. The second is development of new educational applications and contents on Aakash, largely through final year Research and Development projects done by BE/ME students at these Institutes. The emphasis will be on using applications specially developed for Aakash, for effective use of these tablets in the educational process.

Aakash Android Application Programming Workshop for Students 23rd-24th Feb and 2nd-3rd Mar 2013 was conducted under *National Mission on Education through ICT (MHRD, Govt. of India) by IIT Bombay, Mumbai* to develop new open source educational applications and contents for Aakash by B.Tech/ M.Tech students.