

# ***Curriculum Vitae***

## **Dr. Ette Hari Krishna**

<b>Date of birth</b>	10.08.1983
<b>Designation</b>	Assistant Professor Electronics & Communication Engineering
<b>Work Place</b>	University College of Engineering, Kakatiya University, Kothagudem, Telangana State- 507 101 <i>Mobile:</i> +91-99949892604 <i>email:</i> hari_etta@yahoo.co.in

<b>EDUCATION</b>				
<b>Degree</b>	<b>Details (specialization)</b>	<b>Institute/University</b>	<b>Years of Course, Year completed</b>	<b>Percentage, Grade</b>
<b>Diploma</b>	Electronics & Communication Engineering	State Board of Technical Education, Hyderabad	1998-2001, April 2001	73.5, First class
<i>Project Work: Digital Sine wave generation using 8085 microprocessor</i> <i>Supervisor: Sri. G. Ramchandra Rao, Asst. Prof. of ECE, Govt. Polytechnic College, Warangal, Andhra Pradesh.</i>				
<b>B. Tech.</b>	Electronics & Communication Engineering	JNTU Hyderabad	2001-2004, May 2004	74.13, First class with distinction
<i>Project Work: Simulation of Controller Area Network (CAN) protocol</i> <i>Supervisor: Dr. B. Ramesh, Professor of ECE, Kamala Institute of Technology &amp; Science, Huzurabad, Karimnagar, Andhra Pradesh</i>				
<b>M. Tech.</b>	Digital Communications (through GATE)	Kakatiya University, Warangal	2007-2009, July 2009	89.9, First class with distinction
<i>Thesis: Cancellation of echo in audio signals using Hirschman Optimal Transform (HOT) LMS adaptive filter</i> <i>Supervisor: Dr. K. Ashoka Reddy, Professor of ECE, Kakatiya Institute of Technology &amp; Science, Warangal, Andhra Pradesh</i>				

<b>Ph D</b>	Signal Processing for communication	JNTUH, Hyderabad	2011-2021, April 2021	-----
<b>Thesis: Performance enhancement methods for OFDM Systems</b>				
<i>Supervisor: Dr. K. Ashoka Reddy, Professor of ECE, Kakatiya Institute of Technology &amp; Science, Warangal, Telangana State.</i>				
<i>Co-Supervisor: Dr. K. Sivani, Professor of E&amp;I Engg., Kakatiya Institute of Technology &amp; Science, Warangal, Telangana State.</i>				

<b>WORK EXPERIENCE: 20 Years</b>				
<b>Details</b>	<b>Duration</b>	<b>From</b>	<b>To</b>	<b>Organization</b>
Assistant Professor	9 years	9 <sup>th</sup> September 2015	Till date	University College of Engineering, KU, Kothagudem
Assistant Professor	1 ¼ year	1 <sup>st</sup> June 2014	08 <sup>th</sup> September 2015	University College of Engineering & Technology for Women, Kakatiya University Campus, Warangal
Assistant Professor	4 years	23 <sup>rd</sup> July 2010	30 <sup>th</sup> April 2014	KU College of Engineering & Technology, Kakatiya University Campus, Warangal
Assistant Professor	¼ year	5 <sup>th</sup> May 2010	22 <sup>nd</sup> July 2010	University College of Engineering, KU, Kothagudem
Assistant Professor (Regular)	4 years	11 <sup>th</sup> August 2006	4 <sup>th</sup> May 2010	Kakatiya Institute of Technology & Science, Warangal
Lecturer (Adhoc)	1 ½ year	29 <sup>th</sup> November 2004	10 <sup>th</sup> August 2006	Kakatiya Institute of Technology & Science, Warangal

<b>RESEARCH INTERESTS:</b> <i>Signal processing for communications, Biomedical signal processing</i>	
<b>Publications in Peer Reviewed Refereed Journals:</b> SCI (7), Scopus (3), Others (4)	
S. No.	Details
[1].	K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "Improved Bivariate-VAR Model for Extraction of Respiratory Information from Artifact Corrupted ECG and PPG Signals. New Gener. Comput. (June 2024). ( <b>SCI, Impact factor: 2.6, Q2</b> ) ( <b>DOI:</b> 10.1007/s00354-024-00265-2; <b>Electronic ISSN:</b> 1882-7055; <b>Print-ISSN:</b> 0288-36350)

[2].	B. V. Rao, <b>E. H. Krishna</b> and K. A. Reddy, "Wavelet transform generated inherent noise reference for adaptive filtering to de-noise pulse oximeter signals," pp. 251-273, vol. 21, no. 2, June 2024. ( <b>Scopus, Q4</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.2298/SJEE2402251R">https://doi.org/10.2298/SJEE2402251R</a> ; <b>eISSN</b> : 2217-7183; <b>pISSN</b> : 1451-4869)
[3].	B. Jeevan, K. Bikshalu, <b>E. H. Krishna</b> and K. Sivani, "Design of 2-1 multiplexer based high-speed, two-stage 90 nm carry select adder for fast arithmetic units," <i>Elsevier Microprocessor and Microsystems</i> , vol. 99, June 2023. ( <b>SCI, Impact Factor: 2.6, Q2</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.1016/j.micpro.2023.104846">10.1016/j.micpro.2023.104846</a> ; <b>Print ISSN</b> : 0141-9331; <b>Online ISSN</b> : 1872-9436)
[4].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM channel estimation along with denoising approach under small SNR environment using SSA," <i>Journal of Communications software and systems</i> , vol. 18, no.1, pp. 28-35, March 2022. ( <b>Scopus, WoS, ESCI, Q3</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.24138/jcomss.v18i1.1082">10.24138/jcomss.v18i1.1082</a> , <b>ISSN</b> : 1845-6421)
[5].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "New channel estimation method using singular spectrum analysis for OFDM Systems," <i>Springer Wireless Personal Communications</i> , vol. 101, pp. 2193-2207, August 2018. ( <b>SCI, Q3, Impact factor: 2.2</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.1007/s11277-018-5811-5">10.1007/s11277-018-5811-5</a> ; <b>ISSN</b> : 0929-6212; <b>e-ISSN</b> : 1572-834X)
[6].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "On the use of EMD based adaptive filtering for OFDM channel Estimation," <i>Elsevier AEÜ International Journal of Electronics and Communications</i> , vol. 83, pp. 492-500, January 2018. ( <b>SCI, Q2, Impact factor: 3.2</b> )( <b>DOI</b> : <a href="https://doi.org/10.1016/j.aeue.2017.11.002">10.1016/j.aeue.2017.11.002</a> ; <b>ISSN</b> : 1434-8411)
[7].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "Empirical mode decomposition based adaptive filtering for orthogonal frequency division multiplexing channel estimation," <i>International Journal of Engineering (IJE) Transactions A: Basics</i> , vol. 30, no. 10, pp. 1517-1525, October 2017. ( <b>Scopus, Q3</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.5829/ije.2017.30.10a.13">10.5829/ije.2017.30.10a.13</a> ; <b>ISSN</b> : 1728-1431; <b>e-ISSN</b> : 1735-9244)
[8].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "A novel approach for motion artifacts reduction in PPG signals based on AS-LMS adaptive filter," <i>IEEE Trans. Instrum. Meas.</i> , vol. 61, no.5, pp. 1445-1457, May 2012. ( <b>SCI, Q1, Impact factor: 5.6</b> )( <b>DOI</b> : <a href="https://doi.org/10.1109/TIM.2011.2175832">10.1109/TIM.2011.2175832</a> ; <b>ISSN</b> : 0018-9456; <b>e-ISSN</b> : 1557-9662)
[9].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Robust extraction of respiratory activity from PPG Signals using modified MSPCA," <i>IEEE Trans. Instrum. Meas.</i> , vol. 62, no.5, pp. 1094-1106, May 2013. ( <b>SCI, Q1, Impact factor: 5.6</b> ) ( <b>DOI</b> : <a href="https://doi.org/10.1109/TIM.2012.2232393">10.1109/TIM.2012.2232393</a> ; <b>ISSN</b> : 0018-9456; <b>e-ISSN</b> : 1557-9662)

[10].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy, K. Sivani and K. A. Reddy, "ICA based Improved DTCWT technique for MA reduction in PPG signals with restored respiratory information," <i>IEEE Trans. Instrum. Meas.</i> , vol. 62, no.10, pp. 2639-2651, October 2013. ( <b>SCI, Q1, Impact factor: 5.6</b> ) (DOI: 10.1109/TIM.2013.2259114; <b>ISSN:</b> 0018-9456; <b>e-ISSN:</b> 1557-9662)
[11].	<b>E. H. Krishna</b> , M. R. Ram, K. V. Madhav and K. A. Reddy, "VHDL implementation of Hirschman Optimal Transform (HOT) based LMS adaptive filter for acoustic echo cancellation," <i>Majlesi J. of Multimedia Processing</i> . vol. 1, no.1, pp.54-60, March 2012. ( <b>ISSN:</b> 2251-6255; <b>e-ISSN:</b> 2423-4737)
[12].	K. Sharmila, <b>E. H. Krishna</b> and K. A. Reddy, "Rule based identification of cardiac arrhythmias from enhanced ECG signals using multi-scale PCA," <i>Signal Processing: An International Journal (SPIJ)</i> , vol. 7, no.2, pp. 117-130, Sept. 2013. ( <b>ISSN:</b> 1985-2339)
[13].	M. Raju, <b>E. H. Krishna</b> and K. A. Reddy, "A method on step variable LMS algorithm for OFDM channel estimation under fast fading conditions", <i>International Journal of Engineering Science and Technology</i> , vol.9, issue-1,pp.28-34, January, 2017. ( <b>ISSN:</b> 2278-9510; <b>e-ISSN:</b> 0975-5462)
[14].	M. Raju, <b>E. H. Krishna</b> and K. A. Reddy, "On the use of multi-scale singular value decomposition for OFDM channel estimation", <i>International Journal of Engineering Science and Technology</i> , vol.9, issue-1, pp. 47-53, January, 2017. ( <b>ISSN:</b> 2278-9510; <b>e-ISSN:</b> 0975-5462)

### Publications in Refereed Conference Proceedings

S. No	Details
[1].	<b>E. H. Krishna</b> and K. A. Reddy, "On the use of Empirical Wavelet Transform for OFDM channel estimation," in <i>Proc. of 5<sup>th</sup> IEEE International Conference on Innovative Trends in Information Technology ICITIIT-2024</i> , Kottayam, Kerala, India, 15-16, March, 2024, pp. 1-4.
[2].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM channel estimation using novel LMS adaptive algorithm," in <i>Proc. of IEEE International Conference on Computer, Communication &amp; Signal Processing ICCCSP-2017</i> , Chennai, India, 10-11, January, 2017, pp. 1-5. ( <b>DOI:</b> 10.1109/ICCCSP.2017.7944100; <b>Electronic ISBN:</b> 978-1-5090-3716-2)
[3].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM channel estimation using tunable Q-factor wavelet transform," in <i>Proc. of 2016 International Conference on Control, Instrumentation, Communication &amp; Computational Technologies ICCICCT-2016</i> , Kanyakumari, India, 16-17, December, 2016, pp. 566-569. ( <b>DOI:</b> 10.1109/ICCICCT.2016.7988014; <b>Electronic ISBN:</b> 978-1-5090-5240-0)
[4].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "Improved multi-scale principal component analysis based OFDM channel estimation," in <i>Proc. of IEEE International Conference on Wireless Communications Signal Processing and Networking</i>

	(WiSPNET), Chennai, India, 23-25, March, 2016, pp. 1616-1619. (DOI: 10.1109/WiSPNET.2016.7566411; Electronic ISBN: 978-1-4673-9338-6)
[5].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "Performance evaluation of different PAPR reduction methods in OFDM Systems," in Proc. of IEEE International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), Chennai, India, 3-5, March, 2016, pp. 1821-1824. (DOI: 10.1109/ICEEOT.2016.7755002; Electronic ISBN: 978-1-4673-9939-5)
[6].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "A Signal processing method based on multi-scale principal component analysis for OFDM channel estimation," in Proc. of International Conference on Electronics and Communication Systems(ICECS), Coimbatore, India, 25-26, Feb, 2016. (Accepted for Publication in IEEE explore)
[7].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM channel estimation and equalization using multi scale independent component analysis," in Proc. of IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES), Kozhikode, India, 19-21, February, 2015, pp. 1-5. (DOI: 10.1109/SPICES.2015.7091408; Electronic ISBN: 978-1-4799-1823-2)
[8].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "Hardware implementation of OFDM transceiver using FPGA," in Proc. of IEEE International Conference on Computer and computational Sciences (ICCCS), Greater Noida, Ghaziabad, India, 27-29, January, 2015, pp.3-7. (DOI: 10.1109/ICCAKS.2015.7361131; Electronic ISBN: 978-1-4799-1819-5)
[9].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM transceiver using Hirschman optimal transform," in Proc. of International Conference on Photonics, VLSI and Signal Processing (ICPVS), Warangal, India, 28-29, Mar, 2014, pp. 445-449.
[10].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "On the use of singular spectrum analysis for OFDM channel estimation," in Proc. of IEEE International Conference on Electronics and Communication Systems (ICECS), Coimbatore, India, 13-14, Feb, 2014, pp. 1-4. (DOI: 10.1109/ECS.2014.6892792; Electronic ISBN: 978-1-4799-2320-5)
[11].	<b>E. H. Krishna</b> , M. R. Ram, K. V. Madhav, K. Sivani and K. A. Reddy, "EMD based OFDM channel estimation," in Proc. of 29 <sup>th</sup> IEEE International Instrumentation and Measurement Technology Conf., I <sup>2</sup> MTC-2012, Graz, Austria, 13-16, May, 2012, pp. 2161-2164. (DOI: 10.1109/ IMTC.2012.6229395; Electronic ISBN: 978-1-4577-1772-7; Print ISSN: 1091-5281)
[12].	<b>E. H. Krishna</b> , M. R. Ram, K. V. Madhav and K. A. Reddy, "Acoustic Echo Cancellation using a Computationally Efficient Transform Domain LMS Adaptive Filter," in Proc. of 10 <sup>th</sup> IEEE International Conference on Information sciences, Signal Processing and their Applications, Systems and Applications ISSPA-2010, 11-13, May 2010, Kaulalumpur, Malaysia, pp. 409-412. (DOI : 10.1109/ISSPA.2010.5605458; Electronic ISBN: 978-1-4244-7167-6; Print ISBN:

	978-1-4244-7165-2)
[13].	<b>E. H. Krishna</b> , M. R. Ram, K. V. Madhav and K. A. Reddy, "Comparative Wavelet analysis for elimination of Power Line Interference from ECG signals," in <i>Proc. of International Conference on Aerospace Electronics, Communications &amp; Instrumentation, ASECI-2010</i> , 6-7, Jan 2010, Vijayawada, India, pp. 352-355.
[14].	<b>E. H. Krishna</b> , M. R. Ram, K. V. Madhav, K. N. Reddy, K. Sivani and K. A. Reddy, "Performance Analysis of Companding Techniques for Reduction of PAPR in OFDM System," in <i>Proc. International Conference on Communication, VLSI and Signal Processing, ICCVSP – 2013</i> , Tumkur, Karnataka, India, 20-21 Mar, 2013.
[15].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "Motion Artifact Reduction in Photoplethysmographic Signals Using Improved ICA," in <i>Proc. of International Conference on Aerospace Electronics, Communications &amp; Instrumentation, ASECI-2010</i> , 6-7, Jan 2010, Vijayawada, India, pp. 194-197.
[16].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "Evaluation of Wavelets for Reduction of Motion Artifacts in Photoplethysmographic signals," in <i>Proc. of 10th IEEE International Conference on Information sciences, Signal Processing and their Applications, Systems and Applications ISSPA-2010</i> , 11-13, May 2010, Kaulalumpur, Malaysia, pp. 460-463. <b>(DOI :</b> 10.1109/ISSPA.2010.5605443; <b>Electronic ISBN:</b> 978-1-4244-7167-6; <b>Print ISBN:</b> 978-1-4244-7165-2)
[17].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "On the performance of wavelets in reducing motion artifact from photoplethysmographic signals," in <i>Proc. of 4th IEEE International Conference on Bioinformatics and Biomedical Engineering iCBBE-2010</i> , 18-20, June 2010, Chengdu, China, pp. 475-480. <b>(DOI :</b> 10.1109/ICBEBE.2010.55516291; <b>ISBN:</b> 978-1-4244-4712-1; <b>Electronic ISSN:</b> 2151-7622; <b>Print ISSN:</b> 2151-7614)
[18].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Adaptive reduction of motion artifacts from PPG signals using a synthetic noise reference signal," in <i>Proc. of IEEE EMBS International Conference on Biomedical Engineering &amp; Sciences IECBES 2010</i> , Nov 30 to Dec 02 2010, Kaulalumpur, Malaysia, pp. 315-319. <b>(DOI :</b> 10.1109/IECBES.2010.5742252; <b>Electronic ISBN:</b> 978-1-4244-7600-8; <b>Print ISBN:</b> 978-1-4244-7599-5)
[19].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "On the Performance of Time Varying Step-size Least Mean Squares (TVS-LMS) Adaptive Filter for MA Reduction from PPG Signals," in <i>Proc. of IEEE International Conference on Communications &amp; Signal Processing ICCSP 2011</i> , 10-12 Feb, 2011, Calicut, India, pp.431-435. <b>(DOI :</b> 10.1109/ICCSP.2011.5739353; <b>Electronic ISBN:</b> 978-1-4244-9799-7; <b>Print ISBN:</b> 978-1-4244-9798-0)
[20].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "On the performance of AS-LMS based Adaptive Filter for Reduction of Motion Artifacts from

	PPG Signals," in <i>Proc. of 28<sup>th</sup> IEEE International Instrumentation and Measurement Technology Conf., PMTC-2011</i> , Hangzhou, China, 10-12 May, 2011, pp. 1536-1539. <b>(DOI:</b> 10.1109/ IMTC.2011.5944259; <b>Electronic ISBN:</b> 978-1-4244-7935-1; <b>Print ISBN:</b> 978-1-4244-7933-7; Print ISSN: 1091-5281)
[21].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Computation of SpO <sub>2</sub> using non-parametric spectral estimation methods from wavelet based motion artifact reduced PPG signals," in <i>Proc. of IEEE International Conference on Signal processing, Communication Computing and network technologies, ICSCCN-2011</i> , Kumar coil, India, 21-22 July, 2011, pp. 776-780. <b>(DOI:</b> 10.1109/ ICSCCN.2011.6024656; <b>Electronic ISBN:</b> 978-1-61284-653-8; <b>Print ISBN:</b> 978-1-61284-654-5)
[22].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Use of Multi-scale Principal Component Analysis for Motion Artifact Reduction of PPG Signals," in <i>Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011</i> , Trivandrum, India, 22-24 Sept, 2011, pp. 425-430. <b>(DOI:</b> 10.1109/ RAICS.2011.6069348; <b>Electronic ISBN:</b> 978-1-4244-9477-4; <b>Print ISBN:</b> 978-1-4244-9478-1)
[23].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Use of spectral estimation methods for Computation of SpO <sub>2</sub> from artifact reduced PPG signals," in <i>Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011</i> , Trivandrum, India, 22-24 Sept, 2011, pp. 431-436. <b>(DOI:</b> 10.1109/ RAICS.2011.6069349; <b>Electronic ISBN:</b> 978-1-4244-9477-4; <b>Print ISBN:</b> 978-1-4244-9478-1)
[24].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy K. Sivani and K. A. Reddy, "HHT based signal decomposition for reduction of motion artifacts in Photoplethysmographic signals," in <i>Proc. of 29<sup>th</sup> IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2012</i> , Graz, Austria, 13-16 May, 2012, pp. 1730-1734. <b>(DOI:</b> 10.1109/ IMTC.2012.6229404; ; <b>Electronic ISBN:</b> 978-1-4577-1772-7; <b>Print ISSN:</b> 1091-5281)
[25].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy K. Sivani and K. A. Reddy, "Dual-Tree Complex Wavelet Transform for Motion Artifact Reduction of PPG Signals," in <i>Proc. of 7<sup>th</sup> IEEE International Symposium on Medical Measurements and Applications, MeMeA2012</i> , Budapest, Hungary, 18-19 May, 2012. <b>(DOI:</b> 10.1109/ MeMeA.2012.6226643; <b>Electronic ISBN:</b> 978-1-4673-0882-3; <b>Print ISBN:</b> 978-1-4673-0880-9)
[26].	M. R. Ram, K. V. Madhav, <b>E. H. Krishna</b> , K. N. Reddy K. Sivani and K. A. Reddy, "Ensemble EMD for Reduction of Motion Artifacts from Pulse oximeter Signals," in <i>Proc. International Conference on Communication, VLSI and Signal Processing, ICCVSP - 2013</i> , Tumkur, Karnataka, India, 20-21 Mar, 2013.
[27].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> and K. A. Reddy, "On the Extraction of Respiratory Activity from Photoplethysmographic Signals," in <i>Proc. of International Conference on Aerospace Electronics, Communications &amp; Instrumentation, ASECI-</i>

	2010, 6-7, Jan 2010, Vijayawada, India, pp. 367-370.
[28].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> and K. A. Reddy, "A Model Based Method for Deriving Respiratory Activity from Photoplethysmographic signals," in <i>Proc. of 10<sup>th</sup> IEEE International Conference on Information sciences, Signal Processing and their Applications, Systems and Applications ISSPA-2010</i> , 11-13, May 2010, Kaulalumpur, Malaysia, pp. 312-315. <b>(DOI :</b> 10.1109/ISSPA.2010.5605464; <b>Electronic ISBN:</b> 978-1-4244-7167-6; <b>Print ISBN:</b> 978-1-4244-7165-2)
[29].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> and K. A. Reddy, "Monitoring respiratory activity using PPG signals by order reduced-modified covariance AR technique," in <i>Proc. of 4<sup>th</sup> IEEE International Conference on Bioinformatics and Biomedical Engineering iCBBE-2010</i> , 18-20, June 2010, Chengdu, China pp. 385-388. <b>(DOI :</b> 10.1109/ICBEBE.2010.5516378; <b>ISBN:</b> 978-1-4244-4712-1; <b>Electronic ISSN:</b> 2151-7622; <b>Print ISSN:</b> 2151-7614)
[30].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Extraction of Respiration Rate from ECG and BP signals using order reduced-modified covariance AR Technique" in <i>Proc. of IEEE International Conference on Image and Signal Processing CISP 2010</i> , 16-18, Oct., 2010, Yantai, China, pp. 4059-4063. <b>(DOI :</b> 10.1109/CISP.2010.5647507; <b>Electronic ISBN:</b> 978-1-4244-6516-3; <b>Print ISBN:</b> 978-1-4244-6513-2)
[31].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Estimation of respiratory rate from principal components of photoplethysmographic signals, " in <i>Proc. of IEEE EMBS International Conference on Biomedical Engineering &amp; Sciences IECBES 2010</i> , Nov 30 to Dec 02, 2010, Kaulalumpur, Malaysia, pp. 311-314. <b>(DOI :</b> 10.1109/IECBES.2010.5742251; <b>Electronic ISBN:</b> 978-1-4244-7600-8; <b>Print ISBN:</b> 978-1-4244-7599-5)
[32].	K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Extraction of Respiratory Activity from PPG and BP signals using Principal Component Analysis," in <i>Proc. of IEEE International Conference on Communications &amp; Signal Processing ICCSP 2011</i> , 10-12 Feb, 2011, Calicut, India, pp. 452-456. <b>(DOI :</b> 10.1109/ICCSP.2011.5739359; <b>Electronic ISBN:</b> 978-1-4244-9799-7; <b>Print ISBN:</b> 978-1-4244-9798-0)
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[35].	<p>K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b>, K. N. Reddy, and K. A. Reddy, "Use of Multi Scale PCA for Extraction of Respiratory Activity from Photoplethysmographic Signals," in <i>Proc. of 29th IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2012</i>, Graz, Austria, 13-16 May, 2012, pp.1784-1787.</p> <p>(<b>DOI:</b> 10.1109/ IMTC.2012.6229406; <b>Electronic ISBN:</b> 978-1-4577-1772-7; <b>Print ISSN:</b> 1091-5281)</p>
[36].	<p>K. V. Madhav, M. R. Ram, <b>E. H. Krishna</b>, K. N. Reddy, and K. A. Reddy, "Extraction of Respiratory Activity from ECG and PPG signals using Vector Autoregressive Model," in <i>Proc. of 7th IEEE International Symposium on Medical Measurements and Applications, MeMeA2012</i>, Budapest, Hungary, 18-19 May, 2012.</p> <p>(<b>DOI:</b> 10.1109/ MeMeA.2012.6226650; <b>Electronic ISBN:</b> 978-1-4673-0882-3; <b>Print ISBN:</b> 978-1-4673-0880-9)</p>
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[38].	<p>K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "Extraction of Respiratory Activity from Pulse Oximeter Signals using Tunable Q-factor Wavelet Transform," in <i>Proc. of International Conference on Electronics and Communication System (ICECS 2016)</i>, Karpagam college of Engineering, Coimbatore, India, 25-26 Feb., 2016.( in press)</p>
[39].	<p>K. V. Madhav, <b>E. H. Krishna</b> and K. A. Reddy, "Extraction of Surrogate Respiratory Activity from Pulse Oximeter Signals using SSA," in <i>Proc. of IEEE International Conference on Electrical, Electronics &amp; Optimization Techniques (ICEEOT 2016)</i>, DMI college of Engineering, Chennai, India, 3-5 March, 2016.</p> <p>(<b>DOI:</b> 10.1109/ICEEOT.2016.7754979; <b>Electronic ISBN:</b> 978-1-4673-9939-5)</p>
[40].	<p>K. V. Madhav, <b>E. H. Krishna</b>, and K. A. Reddy, "Extraction of Respiratory Activity from Pulse Oximeter's PPG signals using MSICA," in <i>Proc. of IEEE International Conference on Wireless Communications Signal Processing and Networking (WiSPNET)</i>, Chennai, India, 23-25, March, 2016.</p> <p>(<b>DOI:</b> 10.1109/WiSPNET.2016.7566248; <b>Electronic ISBN:</b> 978-1-4673-9338-6)</p>
[41].	<p>K. V. Madhav, <b>E. H. Krishna</b>, and K. A. Reddy, "Extraction of Respiratory Activity from PPG Signals using an Adaptive Fourier Coefficient Estimator," in <i>Proc. 2016 IEEE International Conference on Control, Instrumentation, Communication &amp; Computational Technologies, ICCICCT-2016</i>, Kanyakumari, India, 16-17, December, 2016.</p> <p>(<b>DOI:</b> 10.1109/ICCICCT.2016.7987991; <b>Electronic ISBN:</b> 978-1-5090-5240-0)</p>
[42].	<p>K. V. Madhav, <b>E. H. Krishna</b>, and K. A. Reddy, "Detection of Sleep Apnea from Multiparameter Monitor Signals using Empirical Mode Decomposition," in <i>Proc. of IEEE International Conference on Computer, Communication and Signal Processing</i></p>

	(ICCCSP), Chennai, India, 10-11, January, 2017. (DOI: 10.1109/ICCCSP.2017.7944095; <b>Electronic ISBN:</b> 978-1-5090-3716-2)
[43].	K. Sharmila, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Application of Multiscale Principal Component Analysis (MSPCA) for enhancement of ECG signals," in <i>Proc. of 28<sup>th</sup> IEEE International Instrumentation and Measurement Technology Conf., I<sup>2</sup>MTC-2011</i> , Hangzhou, China, 10-12 May, 2011, pp. 1540-1544. (DOI: 10.1109/ IMTC.2011.5944301; <b>Electronic ISBN:</b> 978-1-4244-7935-1; <b>Print ISBN:</b> 978-1-4244-7933-7; <b>Print ISSN:</b> 1091-5281)
[44].	K. Sharmila, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "Use of higher order spectral analysis for the identification of sudden cardiac death," in <i>Proc. of 7th IEEE International Symposium on Medical Measurements and Applications, MeMeA2012</i> , Budapest, Hungary, 18-19 May, 2012. (DOI: 10.1109/ MeMeA.2012.6226674; <b>Electronic ISBN:</b> 978-1-4673-0882-3; <b>Print ISBN:</b> 978-1-4673-0880-9)
[45].	K. Sharmila, <b>E. H. Krishna</b> , K. N. Reddy and K. A. Reddy, "A New Method for Enhancement of ECG Signals Using Cumulant Based AR Modeling," in <i>Proc. of 2013 IEEE Conference on Information and Communication Technologies, ICT 2013</i> , Kumaracoil, India, 11-12 March, 2013. (DOI: 10.1109/CICT.2013.6558171; <b>Electronic ISBN:</b> 978-1-4673-5758-6; <b>Print ISBN:</b> 978-1-4673-5759-3)
[46].	V. Sharmila, <b>E. H. Krishna</b> , K. A. Reddy, "Cumulant based Teager Energy operator for ECG signal modeling", <i>2013 International conference on Advances in Computing, Communications and Informatics</i> , (ICACCI), 22-25 August-2013, Mysore, pp. 1959-1963. (DOI:10.1109/ICACCI.2013.6637482; <b>Electronic ISBN:</b> 978-1-4673-6217-7; <b>Print ISBN:</b> 978-1-4799-2432-5)
[47].	K. P. Chander, T. Satya savithri, B. Narsimha and <b>E. H. Krishna</b> "Enhancement of color images by scaling Hirschman Transform coefficients" <i>5th International Conference on Industrial and Information Systems, ICIIS 2010</i> , India, pp. 292-296. (DOI: 10.1109/ICIINFS.2010.5578692; <b>Electronic ISBN:</b> 978-1-4244-6653-5; <b>Print ISBN:</b> 978-1-4244-6651-1; <b>Print ISSN:</b> 2164-7011)
<b>DETAILS OF BOOKS / BOOK CHAPTERS AUTHORED (OR) CO-AUTHORED</b>	
[1].	<b>E. H. Krishna</b> and K. A. Reddy, "Use of transforms in biomedical signal processing and analysis," in Dr. Juan Manuel Velazquez Arcos, <i>Real perspective of Fourier Transforms</i> , Intech open, May 2021. ( <b>Book Chapter</b> ) (ISBN: 978-1-83962-398-1)
[2].	<b>E. H. Krishna</b> , K. Sivani and K. A. Reddy, "OFDM Transceiver Using Hirschman Optimal Transform", Elsevier Science & Technology. ( <b>Book Chapter</b> ) (ISBN: 978-935-107-228-7)
[3].	Article presented at <i>International conference ICEDSP 2009</i> published in chapter 1 of book titled "Electronic Design and Signal Processing" Edited by Kumara Shama, K.

	P. Nayak & Somashekara Bhat, Published by <i>Narosa Publishing House Pvt. Ltd.</i> , 2012, India. ( <b>Book Chapter</b> ) ( <b>ISBN:</b> 978-81-8487-160-9)
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### Google Scholar Citation:

[https://scholar.google.com/citations?view\\_op=list\\_works&hl=en&hl=en&user=jr3HyrEAAAJ&pagesize=80](https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=jr3HyrEAAAJ&pagesize=80)

<https://orcid.org/0000-0001-6668-7245>

Researcher ID: O-9100-2015

### Awards and Honours

S. No.	Award Name	Year
[1].	Outstanding Contribution in Reviewing - <b>Elsevier AEU International Journal of Electronics and Communications</b>	2018
[2].	Rotary club of Kakatiya, Hanamkonda, <b>Nation Builder Award 2016 and best teacher</b> on 5th September 2016.	2016

### Details of FDP/Workshop organized

S. No.	Sponsor	Name of the FDP/ Workshop	Duration
[1].	AICTE ATAL Sponsored online FDP	Challenges in capstone of 5G and Artificial Intelligence (C <sup>2</sup> 5GAI)	5 <sup>th</sup> October to 9 <sup>th</sup> October 2020

### FOREIGN VISITS

S. No.	Place of visit	Purpose of visit	Name of Event	Duration
[1].	Kaulalumpur, Malaysia	Paper Presentation	<i>IEEE EMBS International Conference on Biomedical Engineering &amp; Sciences IECBES 2010</i>	Nov 30 to Dec 02, 2010
[2].	Hangzhou, China	Paper Presentation	<i>28<sup>th</sup> IEEE International Instrumentation and Measurement Technology Conf., PMTC-2011</i>	10-12 May, 2011
[3].	Graz, Austria	Paper Presentation	<i>29<sup>th</sup> IEEE International Instrumentation and Measurement Technology Conference, I<sup>2</sup>MTC-2012</i>	12-17 May, 2012
[4].	Budapest, Hungary	Paper Presentation	<i>IEEE International Symposium on Medical Measurements and Applications, MeMeA 2012</i>	18-19 May, 2012

### PROFESSIONAL AFFILIATION

S. No	Details
1.	Member – Institute of Electrical and Electronics Engineers (IEEE – 91235689)
2.	Member – IETE-AM 189173

S. No.	Title of the talk	Name of the Programme
1.	Fundamentals of Digital Communication systems	APSCHES Sponsored Training Programme on "Microprocessors, Microcontrollers and Digital Communications" to the PG teachers during 13 <sup>th</sup> -17 <sup>th</sup> July 2010 at department of Physics, Kakatiya University, Warangal
2.	Use of MATLAB in Digital Signal Processing	Faculty Development Programme on <i>DSP &amp; Its Applications (DSPA)</i> , 8-9, Febraury 2013, organized by department of Electronics & Instrumentation Engineering, KITS Warangal in Association with IETE Warangal Center.
3.	Talk on ' <b>Adaptive Signal Processing in Communications'</b> dated <b>22-12-2016</b>	IETE National level FDP on " <i>Signal processing and its applications</i> " 19 <sup>th</sup> December to 23 <sup>rd</sup> December 2017 organized by Department of Electronics & Communication Engineering, KITS Huzurabad.
4.	Talk on ' <b>Channel estimation techniques for OFDM</b> ' dated <b>06-12-2017 &amp; 07-12-2017</b>	AICTE Sponsored FDP on " <i>Hands on Approach of OFDM system designing in MATLAB</i> " 27 <sup>th</sup> November to 8 <sup>th</sup> December 2017 organized by Department of Electronics & Communication Engineering, KITS Warangal.
5.	Talk on ' <b>MATLAB Tool</b> ' dated <b>25-05-2018</b>	DST SERB Sponsored one week seminar on " <i>Emerging trends in Wireless Networking</i> " 21 <sup>st</sup> May to 25 <sup>th</sup> May 2018 organized by Department of Information Technology, KITS Warangal.
6.	10 <sup>th</sup> May 2019	Key note speaker at the International Conference on Research Trends in Science, Technology, Engineering & Management (ICRSTEM-2019) during 10 <sup>th</sup> to 12 <sup>th</sup> May 2019.
7.	Talk on ' <b>Channel estimation techniques for 4G and 5G wireless communications</b> ' dated <b>06-11-2020, 18-12-2020, 19-01-2021</b>	<b>AICTE Sanctioned STTP on</b> Hands on Project Based Approach of 5G system designing in MATLAB ( <i>Virtual</i> ) <b>Duration: 1 week (Online - 3 Phases)</b> ( <i>Nov 02-07, 2020; Dec 14-19, 2020; and Jan 18-23, 2021</i> ), organized by Department of ECE, Venue: KITS, Warangal
8.	Talk on ' <b>Real time perspectives of Wavelet transform in analysis of Biomedical Signals</b> ' dated <b>06-01-2021, 08-02-2021</b>	<b>AICTE Sanctioned FDP on</b> Hands on Project Based Approach of Biomedical Signal Analysis using MATLAB ( <i>Virtual</i> ), Duration: 2 weeks ( <i>Online - 2 Phases</i> ) ( <i>Dec 28, 2020- Jan 1, 2021; and Feb 01-13, 2021</i> ) organized by Department of ECE, Venue: KITS, Warangal

9.	Talk on 'Time-Frequency Analysis & ML techniques for Biomedical Signals' dated 30-06-2022	Ministry of Electronics and Information Technology (MeitY), sponsored online faculty development program (FDP) on "AI & Machine Learning for Biomedical signal and Image Analysis" during 27 <sup>th</sup> June to 6 <sup>th</sup> July 2022 organized by E & ICT Academy, NIT Warangal in association with KITS Warangal.
10.	Talk on 'MATLAB for Engineering Applications' dated 28 <sup>th</sup> October 2023.	A 3 day workshop on Matlab and 3D printing applications in Engineering, Organized by Department of ECE and ME, KU College of Engineering & Technology, KU Campus, Warangal during 27 <sup>th</sup> -29 <sup>th</sup> October 2023
11.	Talk on 'Hypotheses Testing: Parametric' dated 6 <sup>th</sup> August 2024	Research methodology workshop organized by Faculty of Engineering & Technology, Kakatiya University, Warangal during 5 <sup>th</sup> to 9 <sup>th</sup> August 2024 for all newly admitted PhD scholars
12.	Talk on 'Non-parametric Hypotheses Testing' dated 7 <sup>th</sup> August 2024	

SWAYAM NPTEL ONLINE COURSES - COMPLETED				
S. No	Course Title	Details		
		Duration	During	Result
1	NPTEL "Applied optimization for Wireless, Machine Learning and Big data,"	12 weeks	July-Oct 2023	Elite + Gold (97%) Course Topper
2	NPTEL "Applied Linear Algebra for Signal Processing, Data Analytics and Machine Learning" IIT Kharagpur	12 weeks	Jan-Apr, 2021	Elite + Silver (81%)
3	NPTEL "Digital Signal Processing" IIT Madras	12 weeks	July-Oct, 2019	Elite (64%)
4	SWAYAM ARPIT "Refresher Course on Teacher and Teaching in Higher Education" Savitribai Phule Pune University	16 weeks	1 <sup>st</sup> Sep 2019 to 31 <sup>st</sup> Dec, 2019	Grade B (69%)

5	SWAYAM ARPIT "Leadership And Governance In Higher Education. Level 2" Refresher Course on Teacher and Teaching in Higher Education" Savitribai Phule Pune University	16 weeks	1 <sup>st</sup> Dec 2020 to 31 <sup>st</sup> Mar, 2021	Grade B (65%)
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### Positions Held in College

Designation	College	Date of actual joining	
		From	To
Project Co-coordinator for B. Tech.	Kakatiya Institute of Technology & Science, Warangal.	15-06-2006	30-04-2007
In charge Head of ECE	KU College of Engineering & Technology, KU Campus, Warangal	09-08-2011	30-04-2014
In charge Examination		09-10-2011	30-04-2014
In charge Head of ECE	University College of Engineering & Technology for Women, KU Campus, Warangal	02-06-2014	08-09-2015
In charge Examination		02-06-2014	08-09-2015
In charge Library	University College of Engineering, KU, Kothagudem	09-12-2016	23-01-2023
Chairperson, Board of Studies in ECE, E&I Engineering	Kakatiya University Warangal	Dec 2020	Jan 2023
In charge Examination	University College of Engineering, KU, Kothagudem	10-11-2022	Till date

### Academics:

- Co-ordinator, ELECTROCOM-2007, national level technical symposium, held in Department of Electronics & Communication Engineering, Kakatiya Institute of Technology & Science, Warangal.
- Convener, KLIEO'12, KLIEO'14, national level technical symposium, held at KU College of Engineering & Technology, Kakatiya University Campus, and Warangal.
- Developed laboratories at initial levels in KU College of Engineering & Technology, University College of Engineering & Technology for Women, KU Campus, and Warangal.
- Organized a seminar for the benefit of students of EEE, ECE branches, MATLAB for Engineers at University College of Engineering & Technology for Women, KU Campus, and Warangal.

- Delivered guest lectures in various engineering colleges in and around Warangal in AICTE and DST funded FDP/Workshop.
- Reviewer of IEEE Sensors Journal, IET Signal Processing, Elsevier Biomedical Signal Processing and Control, Elsevier Signal Processing Elsevier AEU International Journal of Electronics & Communications Engineering, Springer Wireless Personal Communications, Australian Journal of Electrical and Electronics Engineering
- Reviewer and Technical Program committee of Various IEEE International Conferences.
- Reviewer of best inspiring minds project of National Innovation Foundation, (INSPIRE- MANAK), Government of India for the year 2021, 2022 and 2023.

**(Dr. E. Hari Krishna)**