

SRI SHRIDEVI CHARITABLE TRUST (R.)

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY



Scholar Name

T.G. ECE Dept., SSIT-Tumkur

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Dr. M.N. ESHWARAPPA

Professor

jenuece2016@gamil.com

+91 9886373235

Google Scholar: https://scholar.google.com/citations?hl=en&user=izMrtcoAAAAJ

Research ID: https://research256/4951/VTU09174951 ORCID: https://orcid.org/0000-0001-7988-394X

Researchgate.net: https://doi.org/10.1080/03772063.2018.1531069

Experience	
Teaching-31 years	
Research-10years	

Educational

Qualification

- Ph.D. from VTU-Belagavi (2013)
- M.Tech. from NITK(KREC)-Surathkal (1999)
- B.Tech. from MCE, Hassan (1992)
- 1. Guest Lecturer: EEE-Dept., MCE Hassan-Sept.1992 to June-1993
- 2. Assistant Professor: TCE Dept., KIT-Tiptur-Sept.1993 to March-2005
- 3. Assistant Professor: TCE Dept., SSIT-Tumkur-April-2005 to Feb.2015
- 4. Professor & HoD: ECE Dept., SIET-Tumkur-March-2015 to July-2015
- 5. Principal: SIET-Tumkur- August-2015 to Nov.2016
- 6. Professor: ECE Dept., SSIT-Tumkur-Dec.2016 to Feb-2023
- 7. Professor & HoD: ECE Dept., SSIT-Tumkur, March-2023 to Jan-2025
- 8. Professor: ECE Dept., SIET-Tumkur, till date.

Area of Interests

1. Signal Processing

Title of PhD Thesis

Authentication

2. Communication Systems

Administrative Posts

- 1. Head of Department of ECE Dept.-SIET-Tumkur and SSIT-Tumkur
- 2. Principal, SIET-Tumkur
- 3. Branch Counselor, IEEE-SIT Student Branch, Tumkur
- 4. Convener, Curriculum Development Cell (CDC)-Tumkur
- 5. Coordinator, Magazine committee
- 6. Warden, Boys Hostel, KIT-Tiptur.

Guided 6 PhD Thesis in the Area of Signal Processing and Communication

=	_	
Development Algorithm for Image Analysis using FPGA Architecture		Naveen B, BGSIT-B.G. Nagar.
multimodal biometric person authentication	Dec. 2022, VTU-Belagavi	Lohith M.S.
system using ear, periocular region and face		KIT-Tiptur.
features		
Peak to average power ratio reduction in	1	Puneeth Kumar D.N.,
multiple input multiple output orthogonal		SSIT-Tumkur
frequency division multiplexing system		
Development of Efficient Algorithms using	Dec-2023, SSAHE-Tumkur	Sharadaguptha M.N.
Optimized Architecture for Secured		SSIT-Tumkur
Mammogram Image Analysis		
Multimodal Fusion of Brain Imaging Data	Dec-2024, SSAHE-	Hareesh K.N. ETE
for Detection and Classification of Brain	Tumkur	Dept., SSIT-Tumkur
Tumour		
Processing of ECG Signal for Person	Dec-2024, SSAHE-	Keshavamurthy

Year of Completion

Certificate of Appreciations

"Bronze Category-2017-18", Ministry of Finance, Govt. of India, Central Board of Direct Taxes, Assessment Year 2017-18.

Tumkur

SIGNIFICANT PUBLICATIONS

(Including Research Scholars)

- 1. "Bimodal Biometric Person Authentication System Using Speech and Signature Features", Volume4, Issue4, Sept-Oct-2010, ISSN-1985-2347, CSC-Journal of International Journal of Biometrics and Bioinformatics (IJBB).
- 2. "Multimodal Biometric Person Authentication System using Speech, Signature and Handwriting Features", Volume 2, No.6, July-2011, ISSN 2156-5570, In International Journal of Advanced Computer Science and Application (JACSA).
- 3. "Fundamental Issues and Challenges of Mathematical Models in Biometric Person Authentication", Volume 6, ISSN-0973-4562, International Journal of Applied Engineering Research (IJAER).

JOURNALS

Total 22

- 4. "Design and Implementation of VLSI DHT Algorithm for ImageCompression", Volume 23, Issue 5, ISSN 2231-5381, May 2015, In International Journal of Engineering Trends and Technology (IJETT).
- 5. "Feedback Shift Register based Cryptographic System using LBIST Method", Volume 23, Issue 4, ISSN 2231-5381, May 2015, International Journal of Eng. Trends and Tech. (IJETT).
- 6. "Design and Implementation of Automotive Instrumentation Display using FPGA", Issue 6, ISSN 2319-5678, April 2016. International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET).
- 7. "An Effective Image Watermarkingusing Weighted Median Prediction", Volume 2, Issue 3, ISSN 2454-5678, April 2016, International Journal of Advanced Trends in Technology, Management and Applied Science (IJATTMAS).
- 8. "Multimodal Biometrics for Person Identification using Ear and Palm Print Features", Vol. 67, no.1, pp 90-97, 2021, https://doi.org/10.1080/0377206.3.2018.1531069, Cite score:2.4, indexing SCI, WOS, SCPUPUS, IETE Journal of Research.
- 9. "A Modified PAPR Reduction of OFDM Systems using Clipping and Filtering for Different Modulation Techniques", Volume 7, No.07, 2018, pp46-50, (UGC Approved Journal) DOI: https://www.ijesi.org/ papers/vol(7)17/Version-4/GO707044650, International Journal of Engineering and ScienceInvention (IJESI).
- 10. "An Efficient DWT-DAPM Technique for PAPR Reduction in OFDM System", Volume 9, Issue 3, Feb.2020, pp-1691-1696, UGC CARE LIST JOURNAL, DOI: 10.35940/ijeat.C5531.029320, International Journal of Eng. and AdvancedTechnology (IJEAT).
- 11. "Multimodal Biometric Person Authentication using Face, Ear and Periocular region based on Convolution Neural Networks", https://doi.org/10.1142/S0219467823500195. Cite score: 1.1, Indexing SCI, W0S, SCOOPUS, International Journal of Image and Graphics, World Scientific Publishing Company.
- 12. **"FPGA Implementation of High-Performance Reversible Logic Method of Array Multiplier"**, Volume XIII, Issue VI, ISSN: 0731-6755, June 2020, A Journal of Composition Theory (JCT).
- 13. "PAPR Reduction Technique for OFDM Systems using perfect Random Sequence and DAPM-DWT for 5G Technology", Volume 6, Special Issue 2, ISSN 0632-6166, March21, Bioscience Biotechnology Research Communications (BBRC) Special Issue Volume 13, Number (13), 2020, pp45.51. Web of Science Journal, Indexed by Thomson Reuters, DOI: http://dx.doi.org/10.21786/bbrc/13.13/7
- 14._"Potential of a Reversible Logic Machine-A-Review", ISSN: 2278-3075, Vol. 9, Issue-1, pp 5473-5483, Blue Eyes Intelligence Engineering. and Science publications, DOI:10.35940/IJITEE.K1601.119119 Nov. 2019, International Journal of Innovative Technology and Exploring Engineering-IJITEE.
- 15. "RL-BLED: A Reversible Logic Design of Bit Level Encryption/Decryption Algorithm for Secure Mammogram Data Transmission", doi.org/10.1007/s11277-022-09584-3, Feb-2022, Wireless Personal Communications: Springer, Web of Science and Scopus Indexed Journal.
- 16. **"ECG Signal Denoising based on Adaptive Filters"**, ISSN 2278-3075, Volume 9, Nov-2019, International Journal Innovative Technology and Exploring Engineering (IJITEE).
- 17. "Comparative Study of Reducing the PAPR of OFDM using the methods of Clipping and SLM", June-2020, ISSN-2278-0181, International Journal of Emerging Research & Technology.
- 18. "Optimized Deep Learning-Based Fully Resolution Convolution Neural Network for Breast tumor Segmentation on Field Programmable Gate Array", International Journal Computer Methods in Biomechanics Biomedical Engineering: Imaging and Visualization",

https://doi.org/10.1080/21681163.2023.2213783. Volume 11, May-2023.

- 19. **"FPGA Implementation on High Performance Reversible Logic of Array Multiplier"**, ISSN-2231-2306, Volume6, Jan-2020, International Journal of Soft Computing and Engineering.
- 20. Comparative Analysis of Brain Tumor Classification using CT, MRI and Fusion of CT and MRI Images with GLCM Features", ISSN: 2147-6799, International Journal of Intelligent Systems and Applications in Engineering.
- 21. "ECG Biometric for Human Authentication using Hybrid Method", ISSN 2321-8169, International Journal on Innovation Trends in Computing and Communication, July 2023.
- 22. "A Novel Peron Authentication Technique using Electrocardiogram", Vol.20, Dec-2023, Journal of Electrical Systems.
- 1. "Multimodal Biometric Person Authentication Using Speech and Signature Information". 16-18 Dec. 2009, at RSET-Kakinada, Cochin- 682039, ISSN 1985-104, National Conference on Communication, Signal Processing and VLSI Design-RASCON-09.
- 2. "Biometric System for Person Authentication", 7th May 2010, at NMAMIT-Nitte-574110, National Conference on RecentTrends in EmergingTechnologies-PGFEST-10.
- 3. "Robust System for Speaker Recognition", May-10, SJBIT-B'lore-60, National Conference on RecentTrends in Electronics and Communication-NCRTEC-2010.
- 4. "Handwriting Recognition Using DTW", 13th-14th Aug 2010, SDMET-Dhavalagiri, Dharwad ISBN 978-93-80568-24-6, Two-day National Conference on Convergence of Signal Processing Communicationand VLSI Design-NCSCV-10.

Communication and VLSI Design-NCSCV-10. 5. "Issues in Multimodal Biometric Person Authentication System", 29th -30th Oct. 2010, at REC- Bhalki, Bidar. ISBN 978-93- 80697-23-9, Two-day International Conference on Communications, Computation, Control and Nanotechnology"-ICN2010.

6. "Off-line Signature and Handwriting Verification Using Dynamic Time Warping", 4th-5th May 2011, at NMAMIT- Nitte-574110. ISBN 978-93-81195-07-9, Two-day International Conference on Emerging Trends in Engineering and Technology-ICETE-11.

- 7. "Multimodal Biometrics for Person Authentication: A Review", 18-20, May 2015, ECE Dept., SVCE-Bangalore, ISBN 978-81-927765-2-1, 2nd International Conference on Networks, Information and Communications-ICNIC 2015.
- 8. "Survey Paper on PAPR Reduction in OFDM Systems", 6th -8th, April, 2016, 978-1-5090-0395-2/16, IEEE International Conference on Communication and SignalProcessing, pp-524-527, April 6-8, 2016, Melmarvathur, Tamil Nadu, India.
- 9. "Review on Multi-Modal Brain Tumor Recognition", 17-18, March 2016, pp 591-596, ISBN 978-1-463-9916-6/16, 2nd IEEE International Conference on Engineering and Technology-2016. 10. "Analysis of PAPR and BER in MIMO PFDM 5G Systems with different Modulation and Transform Techniques", pp-10, Dec. 2-3, 2022, SSIT-Tumkur, Karnataka, IEEE 2nd International Conference on Mobile Networks and Wireless Communications (ICMNWC-2022).
- 11. "ECG Signal Denoising using Complementary Ensemble Mode Decomposition and Kalman Smoother", Pp 21-23, Dec.2017, IEEE-Bangalore Section, SSIT-Tumkur, ISBN: 978-1-5386-1144-9, 3rd IEEE-International Conference on Applied and Theoretical Computing and Communication Technology.
- 12. **"Potential of a Reversible LogicMachine-A Review"**, 5th May-2019, ISSN-682-2-354-7612-7/19, NHCE-Bangalore, 9th International Conference onRecent Engineering and Technology-2019-IEEE-PSES- Bangalore, May-2019.
- 13. "Review Paper on Denoising of ECG Signal", ISBN:978-1-5090-3239-6, pp 22-24, Feb 2017, SVS College of Engineering, Tamil Nadu, 2nd IEEE International Conference on Electrical Computer and Communication Technologies—ICECCT.
- 14. "Fusion of Brain MR Images for Tumor Analysis using Bi-Level Stationary Wavelet Transform", pp 1-5, DOI: 10.1109/ ICMNWC52512.2021.9688369, IEEE International Conference on Mobile Networks and Wireless Communications-ICMNWC.
- 15. **"Review Paper on denoising of ECG Signal",** 2nd International Conference on Electronics, Communication and Computing Technologies (ICECCT), Feb 2017, IEEE Explore.

CONFERENCES

(Total 15)

LIST OF FDP/STTP/WORKSHOP/WEBINER ORGANISED

- 1. Coordinator, 5-Days workshop on Advanced Communications, Wireless Networks and Video Signal Processing, 26-30, June-2013, SSIT-Tumkur.
- 2. Coordinator, 5-Days workshop on Optical Communication and Data Acquisition using Image Processing, 5-9, Aug, 2013, SSIT-Tumkur.
- 3. Coordinator, 3-Days workshop on Mathematical Methods in Electrical Science Engineering, 4-6, March, 2014, SSIT-Tumkur
- 4. Coordinator, 2-Days workshop on Research Trends in Electrical Science Engineering, 10-11, Nov, 2014.
- 5. Coordinator, 1-Day Webinar on "Artificial Intelligence and Data Science for Technology and Health Care", 28/11/2020, SSIT-Tumkur.
- 6. Convener, 3-Days workshop on "Machine Learning using Python", in association with Canes Software, Bangalore, Jan-2020, ECE Dept., SSIT-Tumkur.
- 7. Convener, 3-Days workshop on Internet of Things (IoT), in association with Canes Software, Bangalore, Jan-2019, ECE Dept., SSIT-Tumkur.
- 8. Coordinator, 5-Days STTP on FDP and NBA Training Program, SIET-Tumkur, 23-28, July-2015.
- 9. Convener, 1-Day workshop on "Review on Curriculum-CBCS and OBE", Curriculum Development Cell (CDC), SSIT-Tumkur, 28/4/2018,

PROFESSIONAL MEMBERSHIP: LIFE MEMBER OF MISTE, IEEE MEMBER

- ➤ BOE and BOS, ECE & TCE Dept. SSIT-Tumkur.
- ➢ BOE, TCE Dept. SIT-Tumkur
- > Review Member IETE Journal/2016
- > Technical Program Committee/Reviewer/ICEECCOT/IEEE/GSSSIETW/Mysore
- > Academic Council Member/SSAHE-Tumkur/2018
- Doctoral Committee Member-VTU-Belagavi and Doctoral Committee Member-SSAHE-Tumkur
- Convener-Curriculum Development Cell-SSIT-Tumkur

INVITED LECTURES/JUDGE/EXPERT TALK/RESOURCE PERSON

- a. Invited Speaker on Topic "Signals and Systems", Guest Lecture, SIET, Sira Road, Tumkur, Sept. 2006.
- b. Invited Speaker on Topic "VLSI Design", Guest Lecture, SIET, Sira Road, Tumkur, Sept. 2006.
- c. Invited Speaker on Topic "Optical Communication Systems", Expert Talks, Govt. Diploma Eng. College-Tumkur, Nov2008.
- d. Invited Speaker on Topic "Recent Trends in Electronics", Expert Talk, Sri Siddhartha First Grade Science College, Tumkur, Sept. 2011.
- e. Expert Talk on Topic "Role of Pattern Recognition in Biometrics", SIET, Sira Road, Tumkur, Aug. 2011.
- f. Judge, "Project work Exhibhition-2019", ISTE Student Chapter-SIT-Tumkur, April-2019.
- g. Judge, "TECHNISIUM-2010", State Level Technical Symposium, SIT-Tumkur, April 2011.
- h. Chairperson, "TECHNISIUM-2013", State Level Technical Symposium, SIT-Tumkur, April 2013.
- i. Resource Person, "Emerging Trends in Biomedical Instrumentation and Diagnostic Tools", SSIT-Tumkur, Dec-13.
- h. Resource Person, Technical Seminar on "Modern Trends in Electronics", Kalpataru Science College, Tiptur.
- i. Resource Person, 3-Day workshop on "Machine Learning using Python", in Association with Cranes Software, Dept. of ECE, SSIT-Tumkur, 23-25, Jan-2020.
- j. Resource Person, "Trends in Electronics Engineering-Induction Program", Jan-2021, SSIT-Tumkur.
- l. Resource Person, AICTE Sponsored STTP on "Data Science and Machine Learning", Dept. of CSE, SSIT-Tumkur.

CHAIRPERSON/REVIEWER IN INTERNATIONAL CONFERENCE

- a. Chairperson, National Conference on Advances in Computer Applications, Dept. of MCA, SSIT-Tumkur, May-2013.
- b. Chairperson, ICEITSW-2013, Int. Con. on Emerging Innovative Tech. for A Sustainable world-2013, SIET-Tumkur. c. Reviewer, Technical Program Committee, "International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT-17), Dec-2017.
- d. Chairperson, "2nd International e-Conference on Computer Networks and Soft Computing", ICCNSC-2020, Dept. of CSE, SSIT-Tumkur, 28-29, Dec-2020.
- e. Session Chair, "National Conference on NCETESFT-2020", in Association with Technical Institute Engineers (TIE)-Bangalore, Dept. of ETE, Aug.2020.
- f. Chairperson, "International Conference on Smart Systems for Applications in Electrical Sciences", (ICSSES-2024), 3-4, May-2024. SIT-Tumkur.
- g. Organizing Committee member, "International Conference on Wireless Communication and Internet of Everything (ICWICE-2024), ECE dept., SSIT-Tumkur, 21-22, June-2024.