

Profile Page



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Research Interests :

Biomedical Signal and Image Processing, ECG Signal Processing, Analysis and Interpretation, Linear and Nonlinear methods of Physiological Variability Studies, Digital Signal/Image Processing and its Applications, Multi rate Signal Processing, Filter and Filter Bank Design

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Journal Publications :

Year	Journal	Publication
2023	Journal of Signal, Image and Video Processing,	Kanchan Sharma and Ramesh Kumar Sunkaria, "Novel Multiscale E-metric Cross Sample Entropy Based Cardiac Arrhythmia Detection and Its Performance Investigation in Reference to Multiscale Cross Sample Entropy Based Analysis"
2022	Multimedia Tools and Applications, pp. 1-21 (DOI: 10.1007/s11042-022-12050-8)	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, "Statistical Recursive Minimum Cross Entropy for Ultrasound Image Segmentation,"
2022	AEUE-International Journal of Electronics and Communication.	Aman Kumar, Ramesh K Sunkaria, "Design of uniform cosine modulated filter bank using IACOR-LS and its application in baseline wander removal from ECG signal", (Status: Accepted)

2022	Journal of Biomedical Physics & Engineering Express, Vol. 8, No.6, pp. 2057-2068	Neenu Sharma, Ramesh Kumar Sunkaria and Lakhan Dev Sharma, "QRS Complex Detection Using Stationary Wavelet Transform and Adaptive Thresholding"
2022	Journal of Silicon, Vol. 14, No. 18, pp. 1-10	Faizan Ansari, Tarun Chaudhary, Ramesh K Sunkaria and Mandeep Singh "Comparative Analysis of Nanowire Tunnel Field Effect Transistor for Low Power Application"
2021	Multimedia Tools and Applications, Vol. 80, No. 14, pp. 20773-20802.	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, "Mean Distance Local Binary Pattern: A Novel Technique for Color and Texture Image Retrieval for Liver Ultrasound Images,"
2021	Multidimensional Systems and Signal Processing (https://doi.org/10.1007/s11045-021-00799-4)	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, "Ultrasound Speckle Reduction using Adaptive Wavelet Thresholding,"
2021	International Journal of Computer Applications in Technology, pp. 231-239, Vol. 66, No. 2,	Priyanka Gautam and Ramesh Kumar Sunkaria, "Digitisation of paper-ECG using column wise-median approach",
2021	IRBM vol. 41, no. 1, pp.: 58-70	Lakhan Dev Sharma, and Ramesh Kumar Sunkaria. "Myocardial Infarction Detection and Localization Using Optimal Features Based Lead Specific Approach"
2020	Pattern Recognition and Image Analysis, vol. 30, no. 4, pp. 578-592	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, "Local Tetra-Directional Pattern- A New Texture Descriptor for Content-Based Image Retrieval,"
2020	Journal of Multimedia Tools and Applications, pp. 7675-7686, vol. 80, no.5	
2020	IRBM vol. 41, no. 1, pp.: 58-70	Lakhan Dev Sharma, and Ramesh Kumar Sunkaria. "Myocardial Infarction Detection and Localization Using Optimal Features Based Lead Specific Approach"
2019	Iran Journal of Computer Science, pp.: 1-13	Ram Sewak Singh, Barjinder S Saini, Ramesh K Sunkaria, "Arrhythmia detection based on time–frequency features of heart rate variability and back-propagation neural network"
2019	The Computer Journal	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, Deepti Mittal, "Ultrasound Image Despeckling and Enhancement using Modified Multiscale Anisotropic Diffusion Model in Non-Subsampled Shearlet Domain"
2019	Journal of Image Processing & Pattern Recognition Progress 6, no. 3, pp.: 31-47	Simarjot Kaur Randhawa, and Ramesh Kumar Sunkaria. "Local Binary Pattern-based Noise Robust Feature for Texture Classification"
2019	Mutidimensional Systems and Signal Processing, vol. 30, no. 3, pp.1545-1561	Simarjot Kaur Randhawa, Ramesh Kumar Sunkaria and Emjee Puthooran, "Despeckling of ultrasound images using novel adaptive wavelet thresholding function"
2019	Journal of Innovation and Research in BioMedical Engineering (IRBM), vol. 10, no. 2, pp. 367-379	Lakhan Dev Sharma and Ramesh Kumar Sunkaria, "Novel T-wave detection technique with minimal processing and RR-interval based enhanced efficiency"
2019	International Journal of Information Technology, pp. 1-8	Lakhan Dev Sharma and Ramesh Kumar Sunkaria, "Detection and delineation of the enigmatic U-wave in an electrocardiogram"
2019	Methods of Information in Medicine, Vol. 16, no. 5, pp. 465-486	Ram Sewak Singh, Barjinder Singh Saini, Ramesh Kumar Sunkaria "Classification of cardiac heart disease using reduced chaos features and 1-norm linear programming extreme learning machine"

2018	Journal of Innovation and Research in BioMedical Engineering, IRBM:482, pp 1-15	Ram Sewak Singh, Barjinder Singh Saini, Ramesh K. Sunkaria, "Time Varying Spectral Coherence Investigation of Cardiovascular Signals Based on Energy Concentration in Healthy Young and Elderly Subjects by the Adaptive Continuous Morlet Wavelet Transform,"
2018	Journal of Medical Engineering and Technology, pp.1-5	Omkar Singh and Ramesh Kumar Sunkaria, "A new approach for identification of heartbeats in multimodal physiological signals"
2018	Current Trends in Signal Processing, vol.7, no. 3, pp.: 30-34	Lakhan Dev Sharma, and Ramesh Kumar Sunkaria, "P-and T-wave Characterization in the Presence of U-wave in Electrocardiogram"
2018	Journal of Measurements	Lakhan Dev Sharma and Ramesh Kumar Sunkaria, "Stationary Wavelet Transform based Technique for Automated External Defibrillator using Optimally Selected Classifiers"
2018	Journal of Biomedical Engineering, Vol. 30, Issue 02	Ram Sewak Singh, Barjinder Singh Saini, Ramesh Kumar Sunkaria "Assessment of cardiac heart failure and cardiac artery disease by the higher order spectra"
2017	International Journal of Applied Medical Informatics, Vol. 39, No. 3-4 /2017, pp: 49-66	Ram Sewak Singh, Barjinder Singh Saini, Ramesh Kumar Sunkaria, "Power Spectral Analysis of Short-Term Heart Rate Variability in Healthy and Arrhythmia Subjects by the Adaptive Continuous Morlet Wavelet Transform,
2017	Culuja Medical Journal, Vol. 91, No.2, pp.166-174	Ram Sewak Singh, Barjinder Singh Saini, Ramesh Kumar Sunkaria "Detection of coronary artery disease by reduced features and extreme learning machine"
2017	Journal of Current Trends in Signal Processing, Vol. 7, No. 2, pp.46-58	Priya Gupta, Barjinder Singh Saini, R K Sunkaria, Anukul Pandey, "Stationary wavelet and Recursive Least Square Filtering Based Fetal ECG Data Extraction from Composite Abdominal Signal"
2017	International Journal of Digital Communication and Analog Signals, Vol. 1: Issue 2, pp.9-19	Ram S. Singh, Barjinder S. Saini and R. K. Sunkaria, "Spectral Analysis of Heart Rate Variability Signals using Stockwell-Transform"
2017	Research & Reviews: Journal of Medical Science and Technology, Volume 6, Issue 2, pp. 5-20	Ram S. Singh, Barjinder S. Saini and Ramesh K. Sunkaria, "Power Spectral Study of Heart Rate Variability Time Series by the Adaptive Modified Continuous Morlet Wavelet Transform"
2017	Journal of Australasian Physical & Engineering Sciences in Medicine, pp. 1-7	Omkar Singh and Ramesh Kumar Sunkaria, "Heartbeats detection in multimodal physiological signals using signal quality assessment based on sample entropy"
2017	Journal of Current Trends in Signal Processing, Vol. 7, No. 2	Aman Kumar, Ramesh K. Sunkaria, "A Low Delay Two-Channel Quadrature Mirror Filter Bank using IIR Filter"
2017	Journal of Current Trends in Signal Processing, Vol. 7 (1), pp. 29-34	Lakhan Dev Sharma and Ramesh Kumar Sunkaria, "Microcontroller based Electrocardiography System with Adaptive Baseline Wander Removal"
2017	Journal of Signal Image and Video Processing, pp. 1-8	Lakhan Dev Sharma and Ramesh Kumar Sunkaria, "Inferior Myocardial Infarction Detection using Stationary Wavelet Transform and Machine Learning Approach"
2017	Journal of Australasian Physical & Engineering Sciences in Medicine, Vol. 40, No.1, pp.219-229	Omkar Singh and Ramesh Kumar Sunkaria, "ECG Signal Denoising via Empirical Wavelet Transform"
2016	Journal of Signal, Image and Video Processing, Springer	Rakesh Asery and Ramesh K. Sunkaria, "A novel local octa-pattern feature descriptor for image retrieval"
2016	Chemistry Select 2016, Wiley Online Library, Vol. 1, pp. 4696 – 4703	Nisha Devi, Dharmender Singh, Ramesh K. Sunkaria, Chandi C. Malakar, Saloni Mehra, Ravindra K. Rawal and Virender Singh, "In(OTf) ₃ -HBF ₄ Assisted Multicomponent Approach for One-Pot Synthesis of Pyrazolopyridinone Fused Imidazopyridines
2016	Journal of Signal, Image and Video Processing, Vol. 10, No. 8, pp. 1473-1480	Aman Kumar, Ramesh K. Sunkaria, "Two-Channel Perfect reconstruction (PR) Quadrature Mirror Filter (QMF) Bank Design Using Logarithmic Window Function and spline function"

2016	Journal of Bio-Algorithms and Med-Systems, Vol. 12, No. 2, pp. 61-66	Omkar Singh and Ramesh Kumar Sunkaria, "Empirical Wavelet Transform Based Delineator for Arterial Blood Pressure Waveforms"
2016	Measurement, Vol.87, No. 3, pp. 194-204	Lakhan Dev Sharma and Ramesh K. Sunkaria, "A Robust QRS Detection using Novel Pre-Processing Techniques and Kurtosis based Enhanced Efficiency"
2016	Australasian Physical and Engineering Sciences in Medicine, Vol. 39, No.3, pp. 755-763	Puneeta Marwaha and Ramesh Kumar Sunkaria, "Complexity Quantification of Cardiac Variability Time Series Using Improved Sample Entropy (I-SampEn)"
2016	Journal of Medical & Biological Engineering & Computing, Vol.55, pp. 191-205	Puneeta Marwaha and Ramesh Kumar Sunkaria, "Exploring Total Cardiac Variability in Healthy and Pathophysiological Subjects Using Improved Refined Multiscale Entropy"
2015	Journal of Cardiovascular Engineering and Technology, Vol.6, No. 4, pp. 557-576	Puneeta Marwaha and Ramesh Kumar Sunkaria, "Optimal Selection of Threshold Value 'r' for Refined Multiscale Entropy"
2015	Journal of Biomedical Engineering and Medical Imaging, Vol. 2, No. 3	Santosh Kumar Mishra, Deepti Mittal and Ramesh Kumar Sunkaria, "Designing of Computer Aided Diagnostic System for the Identification of Exudates in Retinal Fundus Images"
2015	Journal of Medical Engineering and Technology, Vol. 39, No. 1, pp. 60-68	Omkar Singh and Ramesh Kumar Sunkaria, "Powerline interference reduction in ECG signals using empirical wavelet transform and adaptive filtering"
2015	International Journal of Medical Engineering and Informatics, Vol. 7, No. 1, pp. 01-14	Puneeta and Ramesh Kumar Sunkaria, "Cardiac variability time-series analysis by sample entropy and multiscale entropy"
2015	International Journal of Signal and Imaging Systems Engineering(IJSISE).Vol. 8, Nos. 1/2, pp. 68-79	Suraj Kumar Bhati, Omkar Singh, Ramesh Kumar Sunkaria, "Beat detection algorithm for ECG and arterial blood pressure waveforms using empirical mode decomposition – A Unified Approach"
2014	International Journal of Computer Application, Vol. 98, No. 15, pp.1-8	Ravi Kumar and Ramesh Kumar Sunkaria, "A Novel Technique of Image Mosaicing Based on Discrete Wavelet Transform and its performance evaluation"
2014	International Journal of Computer Application, Vol. 97, No. 23, pp. 34-38	Akhanda Nand Pathak and Ramesh Kumar Sunkaria, "Multiclass Brain Tumor classification using SVM"
2014	International Journal of Electronic Healthcare (IJEH), Vol. 7, No. 4, pp. 315-330	Ramesh Kumar Sunkaria, Vinod Kumar and Suresh Chandra Saxena, "An ANN- based HRV classifier for cardiac health prognosis"
2014	International Journal of Medical Engineering and Informatics(IJMEI), Vol. 6, No.2, pp. 165-188	Sonali Jha, Omkar Singh, Ramesh Kumar Sunkaria, "Modified approach for ECG signal denoising based on empirical mode decomposition and moving Average Filter"
2014	International Journal of Medical, Pharmaceutical Science and Engineering, Vol. 8, No.3, pp. 1-5	Ramesh Kumar Sunkaria and Puneeta Marwaha, "Gender based variability time-series complexity analysis"
2013	International Journal of Electrocardiology, Vol. 46, No.4, pp. e24-e25	Puneeta Marwaha and Ramesh Kumar Sunkaria, "Sample entropy is unable to explore spatial and temporal fluctuations in physiologic time series!!"
2013	Journal of Industrial and Intelligent Information, Vol. 1, pp.102-106	Ramesh Kumar Sunkaria, "Effect of ekagrata meditation on sympatho-vagal balance-An autoregressive model approach"
2013	International Journal of Computer Applications, Vol. 68, No. 6, pp. 15-20	Nisha and Ramesh Kumar Sunkaria, "Haze Removal and Color Compensation of Underwater Image"

2013	International Journal of Signal and Imaging Systems Engineering (IJSISE), Vol. 6, No. 4, pp. 203-210	Hemant Singh Ajal and Ramesh Kumar Sunkaria, "Optimization of wavelet based image fusion for multi-focused images"
2013	International Journal of Signal and Imaging Systems Engineering (IJSISE), Vol. 6, No. 4, pp. 240-249	Ramesh Kumar Sunkaria, Vinod Kumar and Suresh Chandra Saxena, "Aging effect on HRV dynamics: A comparative study with FFT and AR model"
2012	International Journal of Research and Reviews in Signal Acquisition and Processing (IJRRSAP), Science Academy Publishers, United Kingdom, Vol. 2, No. 1, pp. 65-68	Ranjan Pandey, Omkar Singh, Ramesh Kumar Sunkaria and Indu Saini, "Aging effect on HRV dynamics: An FFT based approach"
2012	International Journal of Advanced Research in Computer Science, Vol. 3, No. 3, pp. 450-455	Sahil Verma, Ramesh Kumar Sunkaria and Barjinder Singh Saini, "Heart Rate Determination with RR Interval and PP Interval Time Series"
2012	International Journal of Biomedical Engineering and Technology, Vol. 9, No.1, pp. 45-59	Ramesh Kumar Sunkaria, Suresh Chandra Saxena, Vinod Kumar and Shirley Telles, "HRV dynamics in four yogic-based meditation states using optimized AR model"
2012	International Journal of Medical Engineering and Informatics (IJMEI), Vol. 4, No. 4, pp. 398-405	Ramesh Kumar Sunkaria, Vinod Kumar and Suresh Chandra Saxena, "Sample entropy based heart rate variability characterization"
2011	International Journal of Medical, Health, Biomedical, Bioengineering and Pharmaceutical Engineering, Vol:5, No:3, pp. 104-109	Ramesh Kumar Sunkaria, "Recent Trends in Nonlinear Methods of HRV Analysis: A Review"
2011	International Journal of Computer Applications, Vol. 36, No. 5, pp. 37-43	Omkar Singh and Ramesh Kumar Sunkaria, "A robust R-peak detection algorithm using wavelet packets"
2011	International Journal of Computer Applications, Vol. 35, No. 7, pp. 39-46	Ramesh Kumar Sunkaria, "The deterministic chaos in heart rate variability signal and analysis techniques"
2010	International Journal of Medical Engineering and Informatics, Vol. 2, No.1, pp. 1-14	Ramesh Kumar Sunkaria, Vinod Kumar and Suresh Chandra Saxena, "A comparative study on spectral parameters of HRV in yogic and non-yogic practitioners"
2010	Journal of Medical Engineering and Technology, Vol. 34, No.02, pp. 108-115	Ramesh Kumar Sunkaria, Suresh Chandra Saxena, Vinod Kumar and Achala M. Singhal, "Wavelet based R-peak detection for HRV studies"
		Puneeta Marwaha, Ramesh K. Sunkaria and Aman Kumar," Suitability of multiscale entropy for complexity quantification of cardiac rhythms in chronic pathological conditions: a similarity patterns based investigation",
	Journal of Measurement and Control, (Sage)	Omkar Singh and Ramesh Kumar Sunkaria, "Detection of Onset, Systolic peak and diastolic notch in arterial blood pressure pulses"

Conference Publications :

Year	Conference	Publication
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2021	IEEE 12th International Conference on Computing Communication and Networking Technologies (ICCCNT), IIT Kharagpur, INDIA, pp. 1-7.	Prerna Bhalla, Ramesh Kumar Sunkaria, Aman Kamboj and Anterpreet Kaur Bedi, "Automatic Fetus Head Segmentation In Ultrasound Images By Attention Based Encoder Decoder Network"
2021	IEEE International Conference ICCWC, Springer	Aditya Singh, Ramesh K Sunkaria, Anterpreet Kaur, "A Review on Local Binary Pattern Variants"
2021	8th IEEE International Conference on Signal Processing and Integrated Networks (SPIN 2021), New Delhi, India.	Akanksha Gupta , Nitesh Kashyap, Ramesh K. Sunkaria, "Single-band Compact Asymmetric meandered patch Antenna(AMPA) with partial Ground Plane for L- band"
2021	10th IEEE International Conference on Communication Systems and Network Technologies (CSNT) pp. 45-49, Tamil Nadu, India,	Akanksha Gupta ,Nitesh Kashyap ,Ramesh K. Sunkaria, "Single Slit Compact Patch Antenna with sectional Ground Plane for Bluetooth and WLAN 802.11b Application",
2021	Fourth IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT 2021), Tamil Nadu, India	Tushar Shivam, Barjinder S Saini, Ramesh K Sunkaria, Ravi Ranjan, "High-Performance analysis of Recessed Gate AlN/?-Ga2O3 HEMT"
2019	3rd IEEE International Conference on Inventive Communication and Computational Technologies (ICICCT-2018) during 20-21 April 2019	Paresh, Barjinder S. Saini, Ramesh K. Sunkaria, "High density fixed valued impulse noise removal using improved decision based hybrid median filter and its application on medical images"
2019	3rd IEEE International Conference on Intelligent Computing and Control Systems (ICICCS), 15-17 May 2019, VAIGAI College of Engineering, Madurai, India	Kapil Kumar, Ramesh K. Sunkaria, Barjinder S. Saini, "PVC ectopic beats detection using genetic based support machine and features of QRS wave"
2019	3rd IEEE International Conference on Intelligent Computing and Control Systems (ICICCS), 15-17 May 2019, VAIGAI College of Engineering, Madurai, India	Sukhdev Singh, Ramesh K. Sunkaria, Barjinder S. Saini, Kapil Kumar "Atrial Fibrillation and Premature Contraction classification using convolutional neural network"
2018	Second International Conference on Inventive Communication and Computational Technologies (ICICCT), pp. 523-530. IEEE, 2018	Lalit Kumar Baghel and Ramesh Kumar Sunkaria. "High Density Fixed Valued Impulse Noise Removal Using Improved Decision Based Hybrid Median Filter and its Application on Medical Images."
2018	Second International Conference on Inventive Communication and Computational Technologies (ICICCT), pp. 280-283. IEEE, 2018	M. Krishna, Ramesh Kumar Sunkaria and Nitish Kashyap, "Image Reconstruction Through Compressed Sensing Technique Using Gaussian Filtration."
2018	1st International Conference on Secure Cyber Computing and Communications (ICSCCC), Jalandhar, IEEE, 15th -17th December 2018	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria, Simarjot Kaur Randhawa, "Local Binary Pattern Variants: A Review"
2018	1st International Conference on Secure Cyber Computing and Communications (ICSCCC), Jalandhar, IEEE, 15th-17th December 2018	Simarjot Kaur Randhawa, Ramesh Kumar Sunkaria, "Investigation of Performance of Savitzky-Golay Filter for Speckle Reduction in Ultrasound Images"
2018	1st International Conference on Secure Cyber Computing and Communications (ICSCCC), Jalandhar, IEEE, 15th -17th December 2018	Simarjot Kaur Randhawa, Ramesh Kumar Sunkaria, Anterpreet Kaur Bedi, "Prediction of Liver Cirrhosis Using Weighted Fisher Discriminant Ratio Algorithm"
2017	4th International Conference on Signal Processing, Computing and Control (ISPCC-2017), 21 -23 September, Jaypee University of Information Technology, Waknaghat, India	Simarjot Kaur Randhawa and Ramesh Kumar Sunkaria, "A comparative analysis of various speckle reduction techniques for ultrasound images"

2017	IEEE International Conference on Computing Communication and Automation (ICCCA2017), Noida, UP, INDIA	Anterpreet Kaur Bedi, Ramesh Kumar Sunkaria and Deepti Mittal, "Enhancement of Ultrasound Images using Modified Anisotropic Diffusion Model in Non-Subsampled Shearlet Domain"
2017	IEEE International Conference on Computing Communication and Automation (ICCCA2017), Noida, UP, INDIA	Gurjinder Singh, Ramesh Kumar Sunkaria, Ajay Gupta, "Modified Quaternion Encryption for DICOM Image"
2017	IEEE International Conference on Signal Processing & Integrated Networks (SPIN2017), Noida, New Delhi-INDIA 2017, pp.1084-1088	Sushmita Yadav and Ramesh Kumar Sunkaria, "Modified Layer Based Infrared and Noisy Image Fusion"
2017	4th IEEE International Conference on Signal Processing, Computing and Control (ISPCC-2017)	Aman Kumar, Ramesh Kumar Sunkaria, "Design of Cosine Modulated Non-Uniform Filter Bank using Particle Swarm Optimization"
2017	Fourth IEEE International Conference on Image Information Processing, pp. 64, Vol. 4, December 21-23-2017., JUIT Wagnaghat, INDIA	Shilpi Gupta and Ramesh K. Sunkaria, "Real Time Salt and Pepper Noise Removal from Medical Images Using a Modified Weighted Average Filtering"
2017	Fourth IEEE International Conference on Image Information Processing, pp. 64, Vol. 4, December 21-23-2017., JUIT Wagnaghat, INDIA	Shilpi Gupta and Ramesh K. Sunkaria, "An improved Edge Detection Using a Modified Discrete Wavelet Transform Based on Morphological Thinner for Noisy Medical Images"
2016	IEEE Second International Conference on Advances in Electrical & Electronics, Information, Communication & Bio Informatics, February, Prathyusha, Chennai, INDIA	Lakhan Dev Sharma, Rakesh Asery, Ramesh Kumar Sunkaria, and Deepti Mittal "Comparative study of Fetal ECG Elicitation using Adaptive Filtering Techniques"
2016	IEEE Second International Conference on Advances in Electrical & Electronics, Information, Communication & Bio Informatics, 27-28 February, Prathyusha, Chennai, INDIA	Lakhan Dev Sharma, Rakesh Asery, Ramesh Kumar Sunkaria, and Deepti Mittal "Comparative study of Fetal ECG Elicitation using Adaptive Filtering Techniques"
2016	IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, 4-6 July, 2016, Delhi Technological University, Delhi, INDIA, Vol.1, pp.1-5	Anju Rani, Deepti Mittal and Ramesh Kumar Sunkaria, "An Improved Method for the Detection of Retinal Blood Vasculature in Computer-Aided Diagnosis of Hypertensive Retinopathy"
2016	IEEE Second International Conference on Advances on Signal Processing, 9-11 June ,Pune, Maharashtra, India	Rakesh Asery and Ramesh Kumar Sunkaria, "Fog Detection using GLCM based Features and SVM", In proceedings of
2016	14th International Conference on Humanizing Work and Work Environment, Dec 8-11 , Jalandhar, India	Lakhan Dev Sharma, Ramesh Kumar Sunkaria and Aman Kumar, "Detection and Delineation of Electrocardiographic Fiducial Points: A Review"
2016	14th International Conference on Humanizing Work and Work Environment, 8-11 December, Jalandhar, India	Aman Kumar, Ramesh Kumar Sunkaria and Lakhan Dev Sharma, "Noise removal from ECG signal using cosine modulated filter bank"
2016	International Conference on Recent Cognizance in Wireless Communication & Image Processing	Yogendra Singh Poonia, Ramesh Kumar Sunkaria, Deepti Mittal and Dipesh Kumar Patidar, "A Novel Hybrid Method for Segmentation of Ultrasound Images"
2016	IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, 4-6 July, Delhi Technological University, Delhi, INDIA	Anju Rani, Deepti Mittal and Ramesh Kumar Sunkaria, "An Improved Method for the Detection of Retinal Blood Vasculature in Computer-Aided Diagnosis of Hypertensive Retinopathy"
2015	IEEE 2nd International Conference (09th INDIACom-2015) on Computing for Sustainable Global Development, 11th -13th March, BhartiyaVidyapeet, New Delhi	PuneetaMarwaha and Ramesh Kumar Sunkaria, "Multi-scale Complexity Analysis of Cardiac Variability Time series in Adult and Mid-aged Females"

2015	IEEE 2nd International Conference (09th INDIACom-2015) on Computing for Sustainable Global Development, 11th -13th March, BhartiyaVidyapeet, New Delhi, INDIA	Omkar Singh and Ramesh Kumar Sunkaria, "Onset Detection in Arterial Blood Pressure pulses using Empirical Wavelet Transform"
2015	IEEE 2nd International Conference (09th INDIACom-2015) on Computing for Sustainable Global Development, 11th -13th March, BhartiyaVidyapeet, New Delhi, INDIA	Omkar Singh and Ramesh Kumar Sunkaria, "The Utility of Wavelet Packet Transform in QRS Complex Detection - A Comparative Study of Different Mother Wavelets"
2015	IEEE 2nd International Conference (09th INDIACom-2015) on Computing for Sustainable Global Development, 11th -13th March, BhartiyaVidyapeet, New Delhi, INDIA	Shaffi M. N. and Ramesh Kumar Sunkaria, "An efficient wavelet based ECG de-noising using level dependent threshoding"
2015	IEEE International Conference on Advance Computing Conference, B.M.S College of Engineering, June 12-13, Bangalore, India	Prateek Bansal, Himanshu Yadav and Ramesh Kumar Sunkaria, "Impulse Noise Removal Using Modified Decision Based Unsymmetric Trimmed Median Filter with Histogram Estimation"
2015	IEEE International Conference on First International Conference on 'Next Generation Computing Technologies' (NGCT-2015), 4-5th September, Dehradun, Uttarakhand, India	Himanshu Yadav, Prateek Bansal and Ramesh Kumar Sunkaria, "Color Dependent K-Means Clustering for Color Image Segmentation of Colored Medical Images"
2015	IEEE International Conference on First International Conference on 'Next Generation Computing Technologies' (NGCT-2015), 4-5th September, Dehradun, Uttarakhand, India	UdayaPratap and Ramesh Kumar Sunkaria, "ECG Compression via Compressed Sensing Using Lempel-Ziv-Welch Technique"
2014	3rd International Conference on Biomedical Engineering and assistive Technologies, February 14-15, UIET, Chandigarh, India	PuneetaMarwaha and Ramesh Kumar Sunkaria, "Exploring the spatial and temporal fluctuations in physiologic time series!!"
2013	IEEE International Conference on Recent Trends in Information Technology (ICRTIT), 25-27 July, Chennai, India	Aman Kumar and Ramesh K. Sunkaria., "Design of Prototype Filter Using Windowing and Linear Optimization Technique for the Non-Uniform Filter Banks"
2013	IEEE International Conference on Signal Processing, Computing and Control, Solan, India	Sonali, Omkar Singh, Ramesh Kumar Sunkaria, "ECG Signal Denoising Based on Empirical Mode Decomposition and Moving Average Filter"
2013	National Conference on Recent Advances in Electrical and Electronics Engineering (NCRAEEEE), 17-18 June, Visvesvaraya Technological University, Davangere, Karnataka, India	NishaKumari and Ramesh Kumar Sunkaria, "Color compensation of underwater image"
2013	National Conference on Recent Advances in Electrical and Electronics Engineering (NCRAEEEE), 17-18 June, Visvesvaraya Technological University, Davangere, Karnataka, India	Puneeta and Ramesh Kumar Sunkaria, "Cardiovascular complexity analysis under meditation"
2012	International Conference on Emerging Trends in Engineering and Management, June 23-24, Rohtak, India	Ramesh Kumar Sunkaria, Yogendra Singh Poonia, Pankaj Kumar Yadav and Bishwajeet Kumar Jha, "ECG de-noising with pattern adaptive wavelet"
2012	International Conference on Emerging Trends in Engineering and Management, June 23-24, Rohtak, India	Yogendra Singh Poonia, Rameh Kumar Sunkaria and Deepti Mittal, "Variable Thresholding based Boundry Delineation in Ultrasound Images"
2012	International Conference on Information, Computing and Telecommunications, April, New Delhi, India	Nagendra Yadav and Ramesh Kumar Sunkaria, "Analysis of HRV signals using Hilbert-Huang Transform"

2012	International Conference on Information, Computing and Telecommunications, April, New Delhi, India	Sahil Verma, Ramesh Kumar Sunkaria and Barjinder Singh Saini, "Delineation of P, QRS and T wave components of ECG"
2012	International Conference on Emerging Trends in Engineering and Management, Rohtak, India, pp. 61-64, June 23-24, 2012	Yogendra Singh Poonia, Rameh Kumar Sunkaria and Deepti Mittal, "Variable Thresholding based Boundary Delineation in Ultrasound Images"
2012	International Conference on Electronics, Communication & Instrumentation "e-manthan2012", Jhansi, Uttar Pradesh, India, April 6-7, 2012	Rajeev Prakash, Barjinder Singh Saini and Ramesh Kumar Sunkaria, "ECG image compression using Bi-Orthogonal Wavelet filter and SPIHT"
2011	IEEE International Conference MTTTS ICACC – 2011, NIT Hamirpur, February, 2011	Vineet Kumar, Barjinder Singh Saini and Ramesh Kumar Sunkaria, "An adaptive selection of IMF for R-peak detection in ECG based on empirical mode decomposition"
2011	International Conference on "Electrical, Computer, Electronics and Communication Engineering (ICECECE-2011)" organized by World Academy of Science, Engineering and Technology, Bangkok, Thailand, March 29-31, 2011	Ramesh Kumar Sunkaria, "Recent Trends in Nonlinear Methods of HRV Analysis: A Review"
2010	4th IEEE International Conference on Advanced Computing and Communication Technologies (ICACCT), October 30, Panipat, India	Omkar Singh and Ramesh Kumar Sunkaria, "A real time QRS-detection algorithm using wavelet packets"
2010	International Conference on Biomedical Engineering and Assistive Technologies, December 17-19, Jalandhar, India	Omkar Singh, Ramesh Kumar Sunkaria and Umakantha Parida, "A comparative study on R-peak detection with various wavelet functions"
2010	International Conference on Biomedical Engineering and Assistive Technologies, December 17-19, Jalandhar, India	Vineet Kumar, B.S.Saini and Ramesh Kumar Sunkaria, "ECG data compression: A review"
2009	International Conference on Applications in Electrical Engineering Recent Advances, December 19-21, Indian Institute of Technology Roorkee, India	Ramesh Kumar Sunkaria, Suresh Chandra Saxena, Vinod Kumar and Shirley Telles, "HRV dynamics under meditation and random thoughts"
2002	International Conference on Photonics Asia, Shanghai, China, pp. 14-18	Ajay Kumar Sharma, Sandeep Kumar Arya, Rajinder Singh Kaler, Vinod Kapoor and Ramesh Kumar Sunkaria, "Time-shift of pulses due to dispersion, its slope, curvature and nonlinearity"
	IEEE International Conference on Information and Communication Technology	Lakhan Dev Sharma, Ramesh Kumar Sunkaria and Aman Kumar, "Bundle Branch Block Detection using Statistical Features of QRS Complex and k-Nearest Neighbours"
	Fourth IEEE International Conference on Image Information Processing, pp. 64, Vol. 4, December 21-23-2017., JUIT Waknaghat, INDIA	Shilpi Gupta and Ramesh K. Sunkaria, "An improved Edge Detection Using a Modified Discrete Wavelet Transform Based on Morphological Thinner for Noisy Medical Images"

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book	Heart Rate Determination with PP and RR-time interval Series	LAMBERT ACADEMIC PUBLISHING	Sahil Verma and Ramesh Kumar Sunkaria	978-3-659-29628-4	2012

Book Chapter	Image Retrieval Techniques Using Content- Based Local Binary Descriptors: A Survey	IGI Global	Rakesh Asery, Ramesh Kumar Sunkaria, PuneetaMarwaha, Lakhan Dev Sharma		
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Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Research and Development	Quantifying Therapeutic Potential of Yogic Meditation Intervention With Efficiently Designed and Developed Multi-Channel Multi-Scale Entropy Technique	DST 2016-17 under Science and Technology of Yoga And Meditation (SATYAM)	September 2018	November 2018	Rs.4958400/-	Research Proposal submitted	None
Principal Investigator	Research and Development	Design and Development of Low Cost Reprogrammable Tele-Cardiac Care and Risk Stratifier System for Native Indians in Remote Inhabitations	Science and Engineering Research Board, Department of Science and Technology	July 2019	August 2019	Rs.4832000/-	Project proposal submitted	None
Project Guide	Fiscal Incentive to UG Students for Industry oriented R&D Projects	Smart Human Tracking System	Enhancement of R & D and Institutional Consultancy Activity in TEQIP-II	2015	2016	Rs. 25000/-	Project Completed	None
Project Guide	Fiscal Incentive to UG Students for Industry oriented R&D Projects	Tranquil Space System	Enhancement of R & D and Institutional Consultancy Activity in TEQIP-II	2015	2016	Rs. 47300/-	Project Completed	None

Project Guide	Fiscal Incentive to UG Students for Industry oriented R&D Projects	Image Based Distinct Multiple Objects Count Using Cell Based High Order Local Autocorrelation in FPGA	Enhancement of R & D and Institutional Consultancy Activity in TEQIP-II	2015	2016	Rs. 47200/-	Project Completed	None
Co-PI	Research and Development	Cloud Based Intelligent Health Monitoring System #40; Proposal no. 6754#41;	IMPRINT India, Govt. of India	2018	2019	Rs. 2.30 Crores	Proposal submitted	None
Co-PI	Research and Development	Computer aided stress recognition using non-invasive bio-signals	TEQIP 3 CRS scheme, AICTE	2019	2020	Rs.8.15 lacs	Ongoing	Dr. Lakhan Dev Sharma, Dr. Ritesh Kumar Saraswat
Principal Investigator	Research and Development	Design and Development of Robust Entropy based Technique for Computer aided Heart Health Diagnosis	DST SERB	2019	2022	Rs 40.44 Lakhs	Ongoing	None
Project In-Charge and Installation Officer	National Broadcasting Project	Low Power Transmitter, Door-Darshan Kendra, Chirhawa, Rajasthan	Ministry of Information and Broadcasting, Government of India	1994	1994	Rs. 1.25 Crore approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Ahjufort, Himachal Pradesh	Ministry of Information and Broadcasting, Government of India	1994	1994	Rs. 35 Lacs approx.	Completed and Operational	None

Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Sarkaghat, Himachal Pradesh	Ministry of Information and Broadcasting, Government of India	1994	1994	Rs. 35 Lacs approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Joginder Nagar, Himachal Pradesh	Ministry of Information and Broadcasting, Government of India	1994	1994	Rs. 35 Lacs approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Kalakot, Jammu and Kashmir	Ministry of Information and Broadcasting, Government of India	1994	1995	Rs. 35 Lacs approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Thanamandi, Jammu and Kashmir	Ministry of Information and Broadcasting, Government of India	1994	1995	Rs. 35 Lacs approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	Very Low Power Transmitter, Door-Darshan Kendra, Budhal, Jammu and Kashmir	Ministry of Information and Broadcasting, Government of India	1994	1995	Rs. 35 Lacs approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	National Channel-7, Upgradation of High Power Transmitter, Pitampura, New Delhi	Ministry of Information and Broadcasting, Government of India	1994	1995	Rs. 10 Crores approx.	Completed and Operational	None

Project In-Charge and Installation Officer	National Broadcasting Project	Low Power Transmitter, Door-Darshan Kendra, Abohar, Punjab	Ministry of Information and Broadcasting, Government of India	1995	1995	Rs. 1.25 Crore approx.	Completed and Operational	None
Project In-Charge and Installation Officer	National Broadcasting Project	High Power Transmitter, Door-Darshan Kendra, Amritsar, Punjab	Ministry of Information and Broadcasting, Government of India	1995	1995	Rs. 10 Crores approx.	Completed and Operational	None

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	International	International Conference on Biomedical Engineering and Assistive Technologies (BEATs-2010)	Dr. B R Ambedkar National Institute of Technology, Jalandhar (Punjab)	17-12-10	19-12-10	Joint Organizing Secretary
Conference	National	National Power System Conference (NPSC)	Indian Institute of Technology Roorkee, Roorkee (Uttarakhand)	26-12-06	29-12-06	Member, Organizing Committee
Workshop	National	Workshop on VLSI Technology	Dr. B R Ambedkar National Institute of Technology, Jalandhar (Punjab)	18-06-05	19-06-05	Member, Organizing Committee
Conference	National	CHEMCON	Dr. B R Ambedkar National Institute of Technology, Jalandhar (Punjab)	27-12-12	30-12-12	Member, Organizing Committee
Conference	International	The Third International Conference on Control, Modelling, Computing and Applications (CMCA)	Coral Diera-Dubai, Diera, Dubai, UAE	07-11-14	08-11-14	Member, Programme Committee
conference	International	IEEE International Conference (INDIACOM-2015) on Computing for Sustainable Global Development	Bharati Vidyapeeth, New Delhi	11-03-2015	13-03-2015	• Member, Technical Programme Committee
conference	International	International conference on Humanizing Work and Work Environment (HWWE-2016), of Indian Society of Ergonomics		08-12-2016	11-12-2016	Member, Organizing Committee

conference	International	International Conference on Production & Industrial Engineering (CPIE-2016)		19-12-2016	21-12-2016	Member,organizing committee
workshop	National	ICT based Virtual Labs	Dr.B.R.Ambedkar National institute of technology	17-06-2015	17-06-2015	Member of organizing committee
workshop	National	Electronics and Communication System Design Aspects	Dr. B R Ambedkar National Institute of Technology, Jalandhar	25-5-2015	29-5-2015	Course Coordinator
workshop	National	Application of Six Sigma in Indian Industry	Dr. B R Ambedkar National Institute of Technology, Jalandhar	09-06-2014	13-06-2014	Course Coordinator
workshop	National	Medical Signal Processing and Its Interpretation	Dr. B R Ambedkar National Institute of Technology, Jalandhar	23-12-2013	27-12-2013	Course Coordinator
workshop	National	Biomedical Instrumentation Systems	Dr. B R Ambedkar National Institute of Technology, Jalandhar	25-12-2013	26-12-2013	Chief Coordinator
workshop	National	VLSI Technology	Dr. B R Ambedkar National Institute of Technology, Jalandhar	18-06-2005	19-06-2005	organizer
STC	National	Current Trends in Signal and Image Processing	Department of Electronics and Communication Engineering, Dr. B R Ambedkar National Institute of Technology, Jalandhar	18-06-2018	22-06-2018	Course Coordinator
STC	National	Recent Trends in Biomedical Signal Processing and VLSI Design	Department of Electronics and Communication Engineering, Dr. B R Ambedkar National Institute of Technology, Jalandhar	30-05-2019	03-06-2019	Course Coordinator

Professional Affiliations :

Designation	Organization
Life Member	Indian Society for Technical Education (ISTE)
Member (Membership: 91215738)	Institute of Electrical and Electronics Engineers (IEEE)
Member (Membership:1-1728678160)	IEEE Engineering in Medicine and Biology Society

Member (Membership:1-1728678160)	IEEE Signal Processing Society
Member (Membership: 1-1728678160)	IEEE Computer Society
Member (Membership: 1-1728678160)	IEEE Information Theory Society

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Anterpreet Kaur Bedi	Multifeature Region Based Image Retrieval	PhD Completed	2021	None
Simarjot Kaur Randhawa	Multimodal Feature Based Image Classification	PhD Completed	2021	None
Vivek Mankotia	Wireless Adhoc Networks	In Progress	2021	Dr Shashi Gurung
Sukhdev Singh	Biomedical Signal Processing	In Progress	2019	Dr Nitesh Kashyap
Kanchan Sharma	Computer Based Cardiac Health Diagnosis	Comprehensive Done	2019	None
Neenu Sharma	Biomedical Signal Processing	Comprehensive Done	2019	None
Ram Sewak Singh	Spectral and Chaos Investigation of Heart Rate Variability Time Series	Ph.D Completed	2019	Dr. Barjinder S. Saini
Mohit Kumar Goel	Novel Filter Banks Design	Comprehensive Done	2019	None
Aman Kumar	Optimal Design and Application of Cosine Modulated Uniform and Non-Uniform Filter Banks	Ph.D Completed	2018	None
Puneeta	Physiological Variability Analysis and Quantification using Non-Linear Techniques	PhD Completed	2017	None
Omkar Singh	Empirical Wavelet Transform Based Multimodal Bio-Signal Analysis for Cardiovascular Health Monitoring	Ph.D Completed	2017	None
Lakhan Dev Sharma	Computer Aided System Design for Cardiac Health Prognosis and Disease Classification	Ph.D Completed	2017	None

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Prerna Bhalla	Automated Segmentation of Fetal Head using 2D Ultrasound Images	M.Tech Completed	2021	None
Aditya Singh	Enhanced Local Tetra Pattern	M.Tech Completed	2021	None
Abhinav Panwar	Ultrasound Image Despeckling using OBFLM Filter, NSST and Anisotropic Diffusion	M.Tech Completed	2021	None
Saumya Tripathi	Pentacene/CuO Type Heterojunction for UV-Vis-NIR Photodetection	M.Tech Completed	2021	Dr Ashish Raman
Tushar Shivam	Front End Methodology for Sub-System Integration and RTL Quality Check & Design and Analysis of High Performance Recessed Gate AIN/? Ga2O3 HEMT	M.Tech Completed	2021	Dr Barjinder S Saini
Monica Panigrahy	A Cohesive Technique for Face Recognition	M.Tech Completed	2020	None

G Yashwant	Blood Vessel Segmentation in Fundus Images	M.Tech Completed	2020	Dr. Pawan K. Verma
Akanksha Gupta	Single Band Compact Meandered Patch Antenna with Partial Ground Plant	M.Tech Completed	2020	Dr Nitesh Kashyap
Kapil Kumar	Detection of PVC Beats using genetic based support machine and features of QRS wave	M.Tech Completed	2019	Dr Barjinder S Saini
Sukhdev Singh	Classification of Premature Atrial Contraction using Deep Learning Techniques	M.Tech Completed	2019	Dr Barjinder S Saini
Paresh	Microwave Photonic FIR Comb Filter	M.Tech Completed	2019	Dr Barjinder S Saini
Rajiv Kumar	Design Textural Feature Analysis algorithm for Forgery Detection in Images	M.Tech Completed	2019	Dr Barjinder S Saini
Shilpi Gupta	An improved edge detection with modified filtering for noisy image	M.Tech Completed	2018	None
Priyanka Gautam	Digitization of paper ECG	M.Tech Completed	2018	None
M. Krishna	Image reconstruction through compressive sensing using Gaussian filtration	M.Tech Completed	2018	None
Lalit Kumar Baghel	Impulse Noise Removal using Hybrid Median Filter and its Application on Medical Images	M.Tech Completed	2018	None

Admin. Responsibilities :

Position Held	Organization	From	To
Liason Officer and Coordinator SC/ST, OBC and PwD Faculty, Staff and Students	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	May 2017	Till date
Warden, Hostel 1	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	March, 2017	March, 2018
Member, Proctor Cell	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	16-02-2017	Till date
Member, QIP Centre	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	13-12-2016	Till date
Member, Departmental Internal Moderation Committee	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2016	Till date
Coordinator, M.Tech, NBA	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2015	June 2016
Department Coordinator, TEQIP-II	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2014	June 2015
Coordinator/Academic Councillor, B.Tech. (ECE)-Final Year	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	June 2014	Till date
Member, Advisory Committee, Nanotechnology Research Laboratory	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	May 2014	
Member, Organizing Committee, Utkansh 2014	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	2014	2014
Coordinator, Major Project, B.Tech.	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2012	June 2014
Officer-in-Charge, Biomedical Signal Processing and Telemedicine Laboratory	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	May 2012	

Coordinator, Ph.D.	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2011	Till date
Coordinator, M.Tech	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2011	June 2012
Coordinator, B.Tech- Third Year	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Departmental Level)	July 2011	June 2012
Member Convocation Committee 2011	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	2011	
Deputy Chief Warden	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	September, 2012	September, 2014
Deputy Chief Warden	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	July, 2016	March, 2017
Warden, Hostel 5	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	March, 2011	October, 2012
Coordinator, Institute of Eminence From ECE Department	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Department Level)	2018	
Warden, Hostel 6	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	November, 2012	September, 2014
Warden, Hostel 7 and 7E	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	July, 2016	March, 2017
Warden, Hostel 1	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Institute Level)	March, 2017	March, 2018
Faculty-in-Charge, Medical Imaging and Computational Modelling of Physiological Systems Laboratory	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Department Level)	2014	Till date
Faculty-in-Charge, Biomedical Signal Processing and Telemedicine Laboratory	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar (At Department Level)	2013	Till date
Head, Department of Electronics and Communication Engineering	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar	24-01-2019	Till Date
Engineer (CNC Laboratory), Block No. VI, Heavy Electrical Equipment Plant	Bharat Heavy Electrical Limited Ranipur, Haridwar (Uttar Pradesh)	1992	1993
Engineer, Shop Floor of Block No. III, Heavy Electrical Equipment Plant	Bharat Heavy Electrical Limited Ranipur, Haridwar (Uttar Pradesh)	1993	1994
Assistant Director (Engineering), IBES, O/o The Chief Engineer (NZ), Shahjahan Road, New Delhi	Indian Broadcasting (Engineering) Services, Ministry of Information and Broadcasting, Government of India.	1994	1995
Assistant Director (Engineering), IBES, TR Division, DG: AIR and DD, Akashvani Bhawan, New Delhi	Indian Broadcasting (Engineering) Services, Ministry of Information and Broadcasting, Government of India.	1995	1996
Assistant Director (Engineering), IBES, ESM Division, DG: AIR and DD, Akashvani Bhawan, New Delhi	Indian Broadcasting (Engineering) Services, Ministry of Information and Broadcasting, Government of India.	1996	1996
Head	Department of Electronics and Communication Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar	January 2019	February 2021