Profile Page

Name	:	Dr Karan Veer	
Designation	:	Assistant Professor Grade-i	
Department	:	Instrumentation & Control Engg.	
Qualification	:	Post Doctorate Punjab University (Funded by GOI)	

PhD In discipline of Electrical and Instrumentation (Thapar Institute of Technology)

M.Tech Control Instrumentation (Kurukshetra University)

B.Tech Instrumentation & Control Engineering (Kurukshetra University)

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Research Interests :

biomedical instrumentation and Machine Learning; statistical applications based solutions to healthcare diseases; computational and experimental approaches for rehabilitation; Ayurveda and biomedical engineering

Other Profile Links :

Google Scholar Link :

scopus Click Here

Personal Web Link :

Researchgate Click Here

Journal Publications :

Year	Journal	Publication
2022	Robotica	Recent Approaches on Classification and Feature Extraction of EEG Signal: A Review
2022	Wearable/Personal Monitoring Devices Present to Future	IoT and Machine Learning Algorithms for Fall Detection
2022	Biomedical Signal Processing and Control	Gender based assessment of gait rhythms during dual-task in Parkinson's disease and its early detection

Year	Journal	Title
2022	Network Modeling Analysis in Health Informatics and Bioinformatics	A spider tool-based qualitative analysis of machine learning for wrist pulse analysis
2022	Recent Patents on Engineering	A GENERALIZED REVIEW OF HUMAN COMPUTER INTERACTION USING ELECTROMYOGRAM SIGNALS
2022	Recent Advances in Computer Science and Communications	APPLICATION OF SOFT COMPUTING TECHNIQUES IN THE CLASSIFICATION OF ECG SIGNAL
2022	Recent Innovations in Mechanical Engineering	Techniques Used in Phonocardiography: A Review
2021	Current Medical Imaging	Significance of mri Guided Focused Ultrasound Thalamotomy for Parkinson Disease: a Review.
2021	Diabetes & Metabolic Syndrome	How artificial intelligence and internet of things can aid in the distribution of COVID-19 vaccines
2021	International Journal of Sensors Wireless Communications and Control	Wavelet Denoising in a Highly Secure Covert Communication
2021	Health Informatics and Technological Solutions for Coronavirus	Prediction of COVID-19 in India Using Machine Learning Tools: A Case Study
2021	Current Signal Transduction Therapy	A Comprehensive Review on the Applications of Ultrasound in Various Industries
2021	Mini reviews in medicinal chemistry	A Systematic Review of Machine Learning Based Gait characteristics in Parkinson's disease.
2021	Current Signal Transduction Therapy	Impact of Coronavirus Outbreak on Climate and Air Quality
2021	Current Signal Transduction Therapy	Trends and Applications of Brain Computer Interfaces
2021	Operations Management and Data Analytics Modelling	Selection of Features and Classifier for Controlling Prosthetic Devices
2021	Measurement	Decomposition and evaluation of SEMG for hand prostheses control
2020	Soft Computing: Theories and Applications,	Decadal growth of BCIs: a review
2020	Current Immunology Reviews	Forecasting of covid-19 cases in india: A predictive study
2020	Infection Control & Hospital Epidemiology	Action and problems related to the COVID-19 outbreak in India
2020	Journal of Neuroscience Methods	A comprehensive assessment of Brain Computer Interfaces: Recent trends and challenges
2020	Current Respiratory Medicine Reviews	Forecasting of Covid-19 cases using machine learning approach
2020	Soft Computing: Theories and Applications,	Audio Transmission Over Wavelet-Based Wireless VoIP
2018	Biomedical Engineering/Biomedizinische Technik	Identification and classification of upper limb motions using PCA
2017	EXPERT SYSTEM (WILEY). DOI 10.1111/exsy.12221	Analysis and recognition of operations using SEMG from upper arm muscles
2016	MEASUREMENT (Elsevier), Vol. 87, pp. 21-26	A Flexible Approach For Segregating Physiological Signals
2016	BIOMEDICAL ENGINEERING/BIOMEDIZINISCHE TECHNIK (BMT), DOI 10.1515/bmt-2016-0038	Electromyographic classification of effort in muscle strength assessment

2015	MEASUREMENT (Elsevier), Vol. 60, pp. 283-291	A Technique for Classification and Decomposition of Muscle Signal for Control of Myoelectric Prostheses Based on Wavelet Statistical Classifier
2015	JOURNAL OF APPLIED STATISTICS (Taylor and Francis) Vol. 42, pp. 1591-1601	Wavelet and short-time Fourier transform comparison-based analysis of myoelectric signals
2015	NEUROPHYSIOLOGY (Springer), Vol. 47, pp. 302- 309	Wavelet Transform-Based Classification of Electromyogram Signals using an ANOVA Technique
2014	ROBOTICA (Cambridge Press Publisher), Vol. 34, pp. 1486-1494	Processing and Interpretation of Surface Electromyogram Signal to Design Prosthetic Device
2014	INSTRUMENTATION SCIENCE AND TECHNOLOGY (Taylor and Francis), Vol. 42, pp. 513-521	Interpretation of Surface Electromyograms to Characterize Arm Movement

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
chapter	Lecture Notes in Mechanical Engineering: Proceedings of ICRITDME 2020	springer	Techniques Used in Phonocardiography: A Review		2022
chapter	Operations Management and Data Analytics Modelling: Proceedings of CIMS-2020	CRC Taylor & Francis	Selection of Features and classifier for Controlling the Prosthetic Devices		2022
chapter	Applications based Understanding of Machine and Deep Learning Algorithms for Signal and Image Processing	Wiley-IEEE	Role of Machine Learning in Wrist Pulse Analysis		2022
chapter	Wearable/Personal Monitoring Devices Present to Future	Springer?Verlag GmbH	IoT and Machine Learning Algorithms for Fall Detection		2021
chapter	Health Informatics and Technological Solutions for Coronavirus (COVID-19)	CRC Taylor & Francis	Prediction of Covid-19 in India using Machine Learning Tools: a Case Study		2020
chapter	Brain and Behaviour Computing	CRC Taylor & Francis	Revolution of Brain Computer Interface: A Review		2020
chapter	Soft Computing: Theories and Applications	springer	Decadal growth of BCIs: a Review		2020
chapter	Soft Computing: Theories and Applications	springer	Audio Transmission over Wavelet based Wireless VOI		2020

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Co-PI	Institute	Data and Risk Analysis based predictive strategies for the Chota Char Dham Yatra in the State of Uttarakhand	TEQIP-III			2.5 Lakh	Granted	Dr OP Verma

Events Organized :

Category	Type	Title	Venue	From	To	Designation
STC	National	EMBEDDED SYSTEM AND WIRELESS SENSOR NETWORK FOR INTERNET OF THINGS(IOT)	NITJ	8-11-2019	12-11-2019	Coordinator
STC	National	Advance Measurement systems and its application (AMSA-2020)	NITJ	26-02-2020	01-03-2020	Coordinator
STC	National	Soft Computing Techniques And Its Applications (SCTA-2020)	NITJ	29-08-2020	02-09-2020	Coordinator
STC	National	Industry 4.0-Industrial Automation Solutions & Applications (IASA-2020)	NITJ	21-09-2020	25-09-2020	Convener
STC	National	Internet of Things (IoT) Opportunities, issues and challenges for Control and Biomedical Applications	NITJ	06-10-2021	10-10-2021	Coordinator
STC	National	Exploratory Applications of Control and Instrumentation (EACI-20)	NITJ	20-08-2020	24-08-2020	Coordinator
STC	National	Recent Trends & Challenges in Instrumentation and Control (RTCIC-2021)	NITJ	20-10-2021	24-10-2021	Coordinator
conference	National	3rd Internation Conference on Soft Computing: Theories and Applications 2018	NITJ	21-12-2018	23-12-2018	Organizing Secretary

Professional Affiliations :

Designation	Organization
Life Time Member	The Institution of Electronics and Telecommunication Engineers (IETE)
Life Time Member	The Institution of Engineers (India)
Life Time Member	Indian Society for Technical Education (ISTE)
Editorial Board Member	BMC Series Editorial Community
Associate Editorial Board Member	Current Signal Transduction Therapy (Scopus)
Editorial Board Member	International Journal on Emerging Technologies (Scopus)
Early Career Advisory Board	Measurement Journal (Elsevier- SCI)
Associate Editorial Board Member	International Journal of Sensors, Wireless Communication and Control (Scopus)
Editorial Board Member	IAES International Journal of Artificial Intelligence (Scopus)
Associate Editorial Board Member	Current Indian Science
Associate Editor	Annals of Advanced Biomedical Sciences
Editorial Board Member	Journal of Biomedical Systems & Emerging Technologies

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Manavi Sharma		O	2021	NIL
Sachin Kumar	Investigations on Radial Artery Pulse to Detect Three Ayurvedic Doshas for Disease Diagnosis	O	2019	Dr Sanjeev Kumar (CSIO)
Pooja	IOT Based Monitoring and Prediction Model for Parkinson's disease	O	2018	Dr SK Pahuja

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
SOURAV MAITY	A HYBRID FRAMEWORK FOR THE FACIAL EMOTION RECOGNITIONS USING ELECTROMYOGRAM (EMG) SIGNAL	O	2022	NIL
SOUMYA RANJAN MOHANTA	FACIAL EMOTION RECOGNITION USING IMAGE ANALYSIS	O	2022	NIL
PRERAK MATHUR	AN ADVANCED HYBRID CLASSIFIER APPROACH BASED ON STATISTICAL ANALYSIS TO IDENTIFY ECG SIGNAL	A	2021	NIL
KEERTI	PATTERN RECOGNITION OF SEMG SIGNAL FOR DIFFERENT HAND GESTURES BY USING THE VARIOUS CLASSIFIERS	A	2020	NIL
NIKITA JATIA	PERFORMANCE COMPARISON OF DE-NOISING METHODS FOR FETAL PHONOCARDIOGRAPHY USING FIR FILTER AND EMPIRICAL MODE DECOMPOSITION (EMD)	A	2020	NIL
Goldan Kumar	CWT And Genetic Algorithm Based Gastrocnemius Muscle EMG signal Noise Minimisation	A	2019	NIL

Admin. Responsiblities :

Position Held	Organization	From	To
Coordinator: 1st Year BEC-I	DEPARTMENT OF ICE, NITJ	Aug 2018	May 2022
Co-Coordinator: M.Tech	DEPARTMENT OF ICE, NITJ	2017	till date
Member Admission Committee M.Tech	DEPARTMENT OF ICE, NITJ	2018	2020
Faculty Incharge Drama, Music club	Dr B R Ambedkar NIT Jalandhar	Aug 2018	2021
Warden Boys Hostel 4	Dr B R Ambedkar NIT Jalandhar	2018	2020
Coordinator EBSB 2020 Event	Dr B R Ambedkar NIT Jalandhar	Jan 2020	Dec 2020
Member, PRO	Dr B R Ambedkar NIT Jalandhar	June 2020	till date
Coordinator/ Lab In-chage: Electrical Machines Lab	DEPARTMENT OF ICE, NITJ	Feb 2020	till date
Co-Coordinator Team Member NSS	Dr B R Ambedkar NIT Jalandhar	June 2020	till date
Faculty Incharge Drama, Music club	Dr B R Ambedkar NIT Jalandhar	Aug 2018	2021
Faculty In charge Dance club	Dr B R Ambedkar NIT Jalandhar	2021	till date
Nodal person for HEIs	Dr B R Ambedkar NIT Jalandhar	Oct 2019	till date

Award and Honours :

Title	Activity	Given by	Year
Research Associate (RA)		Indian Council of Medical research (ICMR), Govt of India	2018
Dr. Kothari Postdoctoral Fellowship		University Grant Commission (UGC), Govt of India	2016