Koneru Lakshmaiah Education Foundation
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Biomechanics and Vision Computing Research Center (L703)

Professor In-charge: Dr. P.V.V.Kishore (3452)

S.No	Item
1	Description
2	Geo Tagged Photo
3	List of Projects
4	Consultancy
5	List of Major Equipment

Salient Features:-

Interdisciplinary Collaboration: The center would foster collaboration between researchers from various disciplines, including biomechanics, computer science, engineering, medicine, and possibly psychology.

Cutting-Edge Facilities: It would be equipped with state-of-the-art laboratories and facilities for conducting experiments, simulations, and data analysis in both biomechanics and computer vision.

Advanced Imaging Technologies: The center would leverage advanced imaging technologies such as motion capture systems, MRI, CT scans, ultrasound, and optical imaging techniques to study human and animal movements, as well as visual perception.

Robotics Integration: Research at the center might involve the development of biomechanically inspired robots or the application of computer vision techniques to enhance robotic systems' perception and control in various environments.

Clinical Applications: The research conducted at the center would have direct applications in clinical settings, such as improving diagnostics, rehabilitation techniques, and assistive technologies for individuals with movement disorders or visual impairments.

Introduction

The Biomechanics and Vision Computing Research Center is an interdisciplinary research center dedicated to advancing our understanding of biomechanics and vision computing through scientific investigation and technological innovation. The center brings together experts from various fields, including biomechanics, computer science, engineering, and vision sciences, to collaborate on cutting-edge projects that have far-reaching implications for healthcare, robotics, computer vision, and more. This lab was established in 2016 with funding from DST.

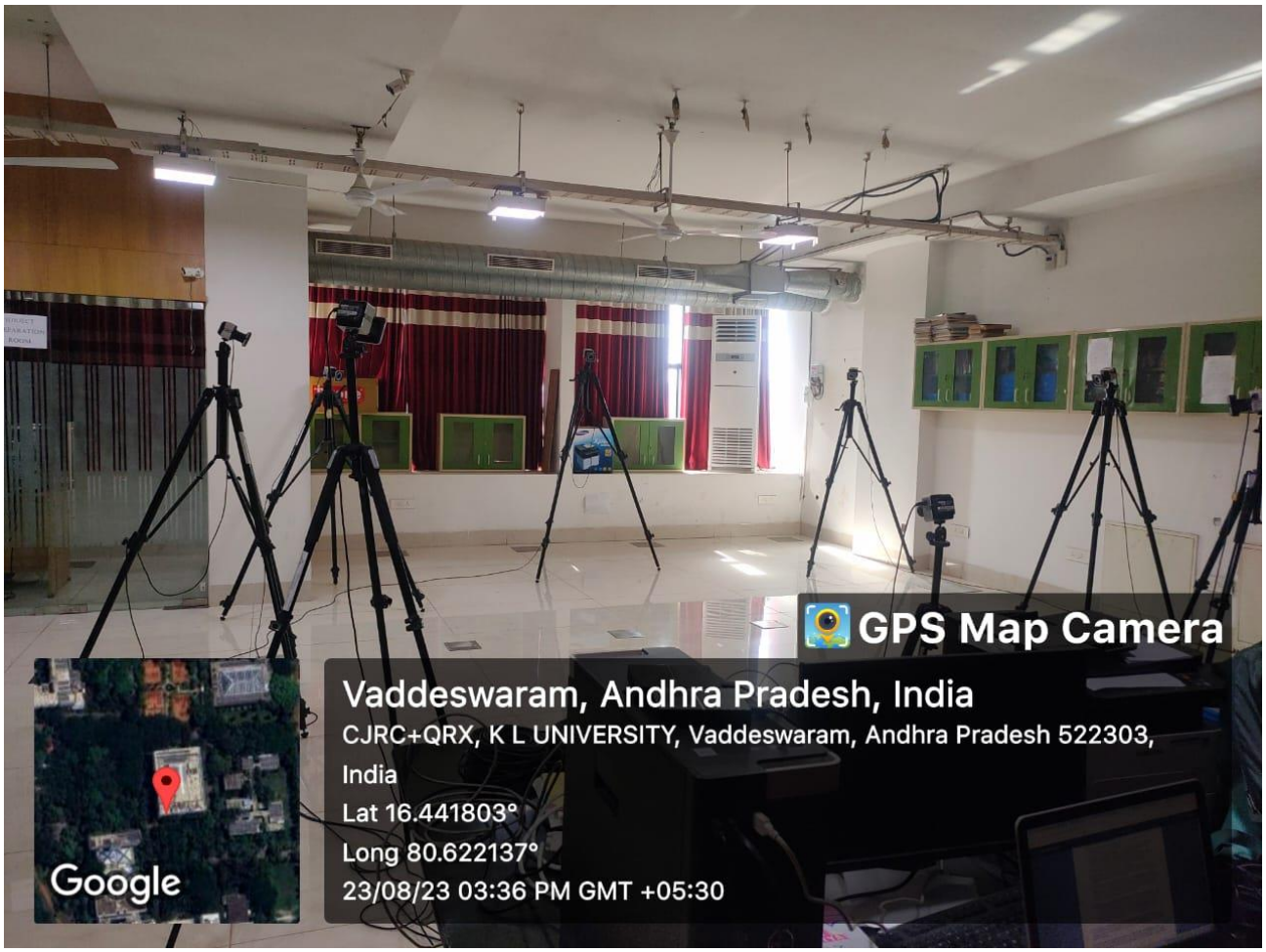
The center's mission is to conduct groundbreaking research in the fields of biomechanics (Sign language and Human action recognition) and vision computing to address real-world challenges and improve human lives.

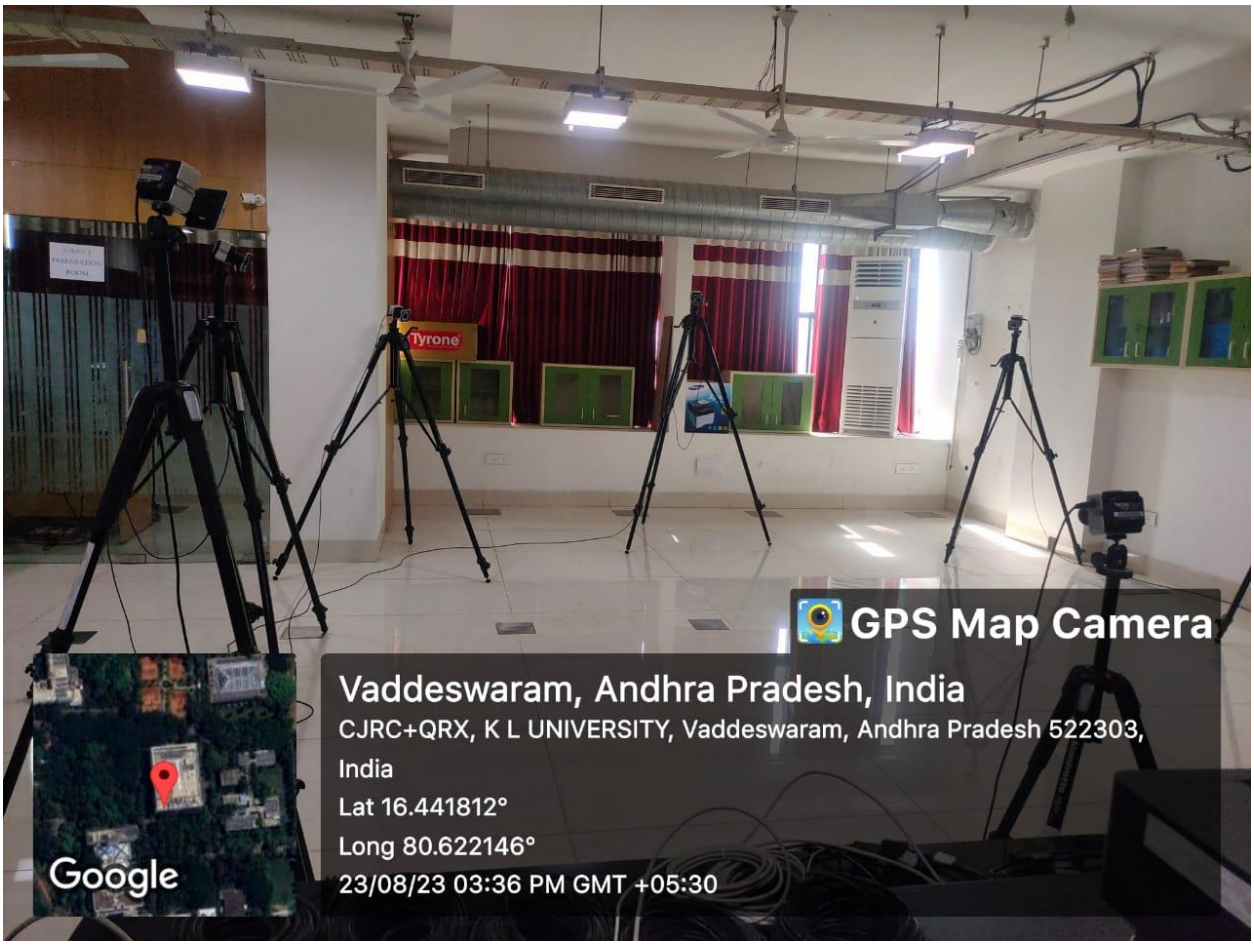
Goals include developing innovative technologies, advancing scientific knowledge, and fostering collaboration between experts in different domains.

Research Areas:

Biomechanics: Investigating the mechanical behavior of biological systems such as the human body, animals, and plants. Research topics may include the study of muscle function, joint mechanics, gait analysis, and the impact of forces on biological tissues.

Vision Computing: Focusing on computer vision, image processing, and machine learning techniques to process, analyze, and interpret visual information. This can include applications like object recognition, image segmentation, and 3D reconstruction.

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Vaddeswaram, Andhra Pradesh, India
CJRC+QRX, K L UNIVERSITY, Vaddeswaram, Andhra Pradesh 522303, India
Lat 16.441812°
Long 80.622146°
23/08/23 03:36 PM GMT +05:30
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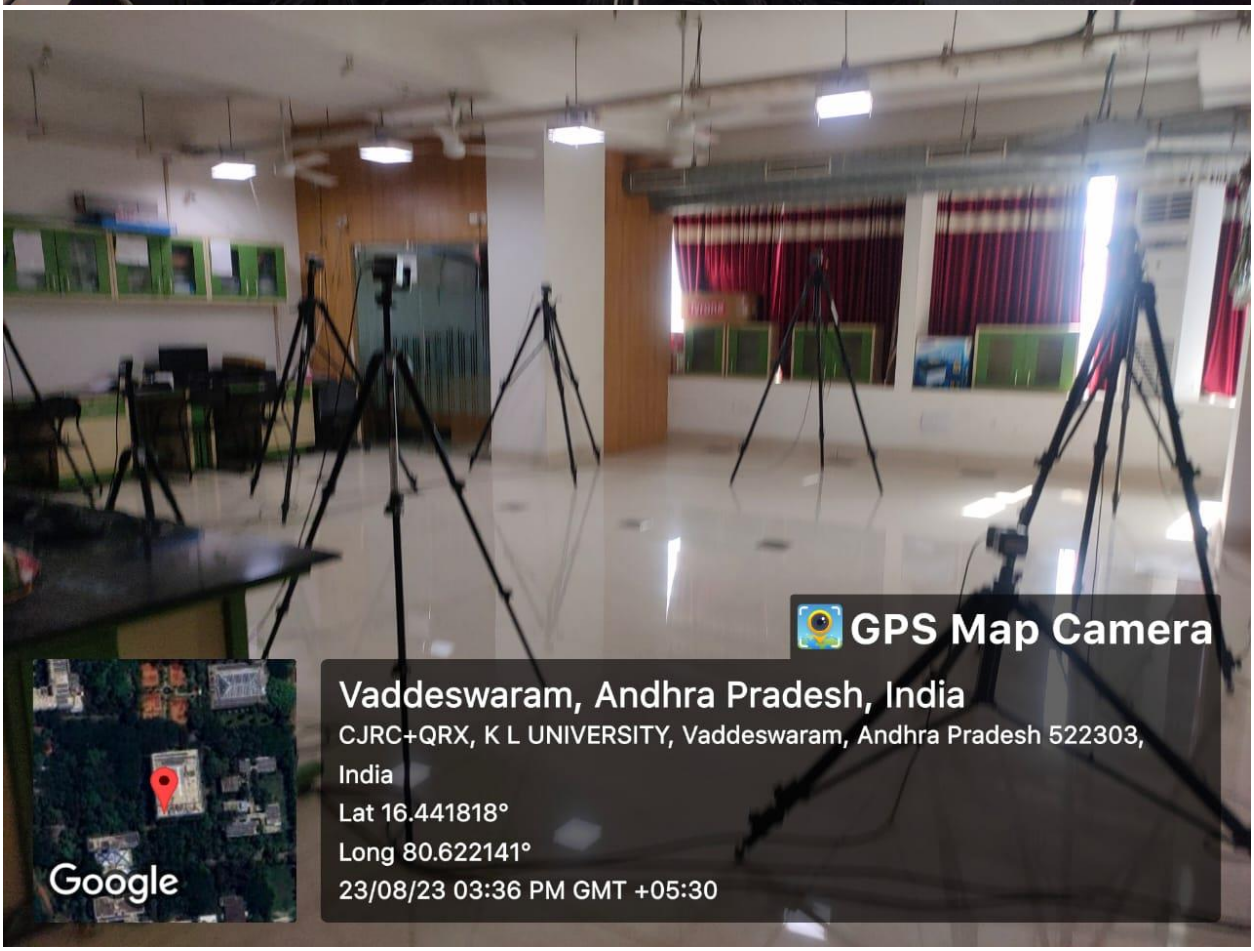
GPS Map Camera
Vaddeswaram, Andhra Pradesh, India
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Objectives

Integrate Biomechanics and Computer Vision for Enhanced Rehabilitation:

- Develop innovative methodologies that combine biomechanical analysis and computer vision techniques to improve rehabilitation outcomes for individuals recovering from injuries or surgeries.
- Create wearable sensor systems and computer vision algorithms to accurately assess movement patterns, track progress, and personalize rehabilitation programs.
- Investigate the effectiveness of augmented reality and virtual reality platforms integrated with biomechanical feedback and visual cues to enhance motor learning and functional recovery.

Advance Understanding of Human-Computer Interaction through Biomechanics and Vision:

- Explore how biomechanics and computer vision principles can be applied to optimize human-computer interaction (HCI) in various domains, such as gaming, virtual environments, and human-robot collaboration.
- Design user interfaces and interaction techniques that leverage biomechanical insights and visual perception to enhance user experience, task efficiency, and user safety.
- Investigate the impact of ergonomic factors, including posture, movement biomechanics, and visual display characteristics, on user comfort, performance, and long-term health in HCI systems.

Develop Assistive Technologies for Aging and Accessibility:

- Engineer assistive technologies that integrate biomechanical analysis and computer vision capabilities to support aging populations and individuals with disabilities in performing daily activities and maintaining independence.
- Design smart home systems equipped with sensors and vision-based monitoring to detect falls, assess mobility, and provide real-time assistance or alerts to caregivers.
- Develop wearable devices and computer vision algorithms to enhance navigation assistance, object recognition, and communication for individuals with visual impairments or cognitive limitations.

List of Projects:

Sl. No.	Name of the Project	Name of the PI	Sponsoring agency	Date/ duration	Amount spent	No of faculty involved	No of students involved	Outcomes – Paper/poster/prize/etc
1	Visual Verbal Machine Interpreter Fostering Hearing	P.V.V.Kishore	DST/TIDE	3 Years	Rs.62,50000	1	3	12 SCI Indexed Publications.

	Impaired and Elderly							
2	DeepExtreme: A Deep Learning Model Design for Extreme Weather Prediction	P.V.V.Kishore	KLEF/Internal Funding	1 Year	Rs.3,93,250	1	0	1 SCI Indexed Publication

Consultancy:

Sl. No.	Name of the Project	Name of the PI	Sponsoring agency	Date/ duration	Amount spent	No of faculty involved	No of students involved	Outcomes – Paper/poster/prize/etc
1.	Creating Indian Classical Dance Gestures in 3D using Mocap	P.V.V.Kishore	PACE engineering College for DST funded SRG Project.	1 Year	Rs.44,100	0	0	3D Indian classical dance dataset.
2.	Annotating and Organizing Indian classical dance gestures	E.Kiran Kumar	PACE engineering College for DST funded SRG Project.	1 Year	Rs.44,100	0	0	RGB Video Based ICD Dataset.

List of equipment details:

Sl. No.	Name of the facility	Specification	Quantity	Amount Rupees	Date of purchase	Sponsored by
1	High-performance computer	HP super computer, 2016.	2	1,66754	2016	DST
2	Motion Capture Technology	Vicon Vero v2.2 2.2 Megapixel optical camera @ 330 FPS at full frame & featuring a varifocal lens (6 to 12mm) and IR strobe. – 2016	8	47,55,856	2016	DST
3	Motion Capture Technology	Vicon Vue video camera Colour reference video camera, 60 FPS, 1980 x 1080p (window to 1280 x 720p @ 120FPS) with 6-12mm lens	1		2016	DST
4	Motion Capture Technology	Vicon Camera Cable - 30 m 30 m Vicon Camera cable with Ferrite For use with Vantage, Vero, Vue	10		2016	DST

		& Bonita cameras.				
5	Motion Capture Technology	Vicon Active Wand IR Vicon Active 5-Point Calibration Wand with IR and VR LEDs for calibration of optical cameras and required for reference video, if applicable.	1		2016	DST
6	Motion Capture Technology	16 Port PoE+ Gigabit Switch 16 Port POE+ switch suitable for Vantage, Vero, Vue & Bonita cameras. Comes with 5 m cat 5e data cable.	1		2016	DST
7	Motion Capture Technology	Dell Precision Tower 5810 CTO Base Dell Precision T5810 685W Chassis Intel Xeon Processor E5-1620 v3 (Four Core HT, 3.5 GHz Turbo, 10 MB), 16GB (4x4GB) 2133MHz	1		2016	DST

		DDR4 ECC RDIMM 2 x 2TB 3.5inch Serial ATA (7,200 Rpm) Hard Drive Non RAID 8x Slimline DVD+/-RW Drive 2 GB NVIDIA Quadro K620 (DP, DL-DVI-I) (1DP to SL-DVI adapter) Dell Optical (Not Wireless)				
8	Motion Capture Technology	Large PC Monitor Dell U2312HM 23" Monitor with LED UltraSharp VGA,DVI,DP (1920x1080)	1		2016	DST
9	Motion Capture Technology	Basic Life Science Accessory Kit Includes 50x 9.5mm hard markers on plastic bases, 50x 14mm hard markers on plastic bases, 2 rolls of double sided tape, 5 rolls of	1		2016	DST

		Micropore tape, scissors & Seca measuring tape for circumferences in a black plastic case.				
10	Motion Capture Technology	Extended Life Science Accessory Kit Consisting of 2 x head bands, 4 x wristbands, 4 x 100mm wrist bars, 8 x base pads for marker wands, 8 x mobile joint packs, 8 x fixed joint pack, 1 x 385mm bar, 8 x threaded inserts for the tubing and a pair of callipers.	1			DST
11	Motion Capture Technology	Vicon Nexus 2.0 Network	1		2016	DST
12	Surveillance Video System	2.2 Mega pixel Video cameras with DVR	9	44,5258	2017	DST
13	Server class Computer for High performance Computing	16 GB DDR 4 RAM, 8 GB NVIDIA Graphics Card (A-4000 Series), 512 GB	1	3,93,200	2022	DST

		SSD, i7 Intel Processor, 1TB Hard Drive,				

Return

Faculty - Ph.Ds Enrolled/Awarded

S. No	Name of the Faculty Member/Scholar	Title of the Ph.D topic	Name of the University	Name of the Guide	Date of Enrollment	Date of Award	Designation/ Position	Remarks
1	M.V.D.Prasad	Continuous sign language recognition under versatile camera models with machine learning	KL University, Guntur	**P.V.V.Kishore**	**2013**	**2017**	Associate Professor, KL University, Guntur	Ph.D. Awarded
2	Ch.Raghava Prasad	Computer Vision Based Train Rolling Stock Examination	KL University, Guntur	**P.V.V.Kishore**	**2013**	**2017**	Associate Professor, Department of ECE, KL University, Guntur	Ph.D. Awarded
3	K.V.V.Kumar	Human Action Recognition on Unconstrained Indian Classical Dance Videos	KL University, Guntur	**P.V.V.Kishore**	2014	2019	Research Scholar, KLU	Ph.D. Awarded

4	G Anantha Rao	Selfi Sign Language Recognition - A Mobile Based Model	KL University, Guntur	**P.V.V.Kishore**	2014	2019	Research Scholar, KLU	Ph.D. Awarded
5	E Kiran Kumar	Visual Verbal Machine Interpreter Fostering Hearing Impaired and Elderly	KL University, Guntur	**P.V.V.Kishore**	2015	2020	Research Scholar, KLU	Ph.D. Awarded
6	N Sasikala	Train Rolling Stock Examination Assistant : A Computer Vision Approach to Manual Rolling Stock Examination	KL University, Guntur	**P.V.V.Kishore**	2014	2020	Research Scholar, KLU	Ph.D. Awarded

R & D and Consultancy Activities

List of Projects undertaken in Research lab

Sl. No.	Name of the Project	Name of the PI	Sponsoring agency	Date/ duration	Amount spent	No of faculty involved	No of students involved	Outcomes – Paper/poster/prize/etc
1	Visual Verbal Machine Interpreter Fostering Hearing Impaired and Elderly	P.V.V.Kishore	DST/TIDE	3 Years	Rs.62,50000	1	3	12 SCI Indexed Publications.
2	DeepExtreme: A Deep Learning Model Design for Extreme Weather Prediction	P.V.V.Kishore	KLEF/Internal Funding	1 Year	Rs.3,93,250	1	0	1 SCI Indexed Publication
3.	Creating Indian Classical Dance Gestures in 3D using Mocap	P.V.V.Kishore	PACE engineering College for DST funded SRG Project.	1 Year	Rs.44,100	0	0	3D Indian classical dance dataset.
4.	Annotating and Organizing Indian classical dance gestures	E.Kiran Kumar	PACE engineering College for DST funded SRG Project.	1 Year	Rs.44,100	0	0	RGB Video Based ICD Dataset.

Deliverables

- Integrated Biomechanical-Computer Vision System for Movement Analysis:

Develop a comprehensive system that combines biomechanical measurement techniques (such as motion capture) with computer vision algorithms for real-time analysis of human or animal movement. This system would provide detailed kinematic and kinetic data, enabling researchers and clinicians to better understand biomechanical dynamics in various contexts, such as sports performance, rehabilitation, and ergonomics.

- Smart Assistive Device for Visually Impaired Individuals:

Design and prototype a wearable device equipped with computer vision capabilities to assist visually impaired individuals in navigation and object recognition tasks. The device could utilize machine learning algorithms to detect and interpret visual cues in the environment, providing auditory or

tactile feedback to the user to enhance spatial awareness and autonomy.

- ❖ Virtual Rehabilitation Environment for Motor Skills Training:

Create an immersive virtual reality (VR) rehabilitation platform tailored to individuals recovering from motor impairments, such as stroke survivors or patients with neurological disorders. The platform would leverage both biomechanical principles and computer vision techniques to provide interactive and personalized rehabilitation exercises, fostering motor relearning and functional recovery in a safe and engaging environment.

- ❖ Open-Source Biomechanics and Vision Computing Software Suite:

Develop a modular and user-friendly software suite comprising tools and libraries for biomechanical analysis and computer vision tasks. This open-source platform would enable researchers, clinicians, and developers to access advanced algorithms, perform data processing and visualization, and collaborate on interdisciplinary projects, ultimately accelerating innovation and knowledge dissemination in the field.

- ❖ Educational Curriculum on Biomechanics and Computer Vision Integration:

Create a comprehensive educational curriculum or training program that integrates concepts from biomechanics and computer vision, catering to students, professionals, and researchers interested in interdisciplinary studies. This curriculum could include lectures, hands-on workshops, case studies, and online resources covering topics such as motion analysis, image processing, machine learning, and their applications in biomechanics and vision computing research.

List of Publications

S.No	Authors	Title	Year	Source title
1	D. A.K.; P.V.V. K.; T.R. C.; K. S.	Multi frame multi-head attention learning on deep features for recognizing Indian classical dance poses	2024	Journal of Visual Communication and Image Representation
2	Kishore P.V.V.; Lokesh T.; Mallik E.K.N.; Rishit P.; Jaswanth N.	Fast and high precision model for fake news detection	2024	AIP Conference Proceedings
3	Mopidevi S.; Prasad M.V.D.; Kishore P.V.V.	Multiview meta-metric learning for sign language recognition using triplet loss embeddings	2023	Pattern Analysis and Applications
4	Sameer R.H.; Rambabu S.; Kishore P.V.V.; Kumar D.A.; Suneetha M.	Pose Driven Deep Appearance Feature Learning for Action Classification	2023	Lecture Notes in Networks and Systems
5	Ashraf Ali S.K.; Prasad M.V.D.; Hima Bindu G.; Praveen Kumar P.P.; Anil Kumar D.; Kishore P.V.V.	Pose Based Multi View Sign Language Recognition through Deep Feature Embedding	2023	International Journal of Intelligent Engineering and Systems

6	Anil Kumar D.; Kishore P.V.V.; Murthy G.V.K.; Chaitanya T.R.; Subhani S.K.	View Invariant Human Action Recognition using Surface Maps via convolutional networks	2023	2023 IEEE International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering, RMKMATE 2023
7	Kishore P.V.V.; Kumar D.A.; Moinuddin S.K.K.; Divyasree L.; Kumar E.K.	Recognition of Indian classical dance poses in multi head attention learning framework	2023	2023 IEEE International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering, RMKMATE 2023
8	Suhas T.C.; Teja P.O.P.R.; Rakesh N.S.; Kumar D.A.; Kishore P.V.V.	Skeletal Action Recognition with Local Joint Perimeter Maps Learned Using Deep Metric Embedding	2022	2022 IEEE Delhi Section Conference, DELCON 2022
9	Kumar D.A.; Sastry A.S.C.S.; Kishore P.V.V.; Kumar E.K.	3D sign language recognition using spatio temporal graph kernels	2022	Journal of King Saud University - Computer and Information Sciences
10	Kanchimani S.; Suman M.; Kishore P.V.V.	Learning Global Average Attention Pooling (GAAP) on Resnet50 Backbone for Person Re-identification Problem	2022	International Journal of Advanced Computer Science and Applications
11	Krishnamohan K.; Prasad C.R.; Kishore P.V.V.	Train rolling stock video segmentation and classification for bogie part inspection automation: a deep learning approach	2022	Journal of Engineering and Applied Science
12	Ali S.K.A.; Prasad M.V.D.; Kumar P.P.; Kishore P.V.V.	Deep Multi View Spatio Temporal Spectral Feature Embedding on Skeletal Sign Language Videos for Recognition	2022	International Journal of Advanced Computer Science and Applications
13	Suneetha M.; Prasad M.V.D.; Kishore P.V.V.	Sharable and unshareable within class multi view deep metric latent feature learning for video-based sign language recognition	2022	Multimedia Tools and Applications
14	Ali S.A.; Prasad M.V.D.; Kishore P.V.V.	RANKED MULTI-VIEW SKELETAL VIDEO-BASED SIGN LANGUAGE RECOGNITION WITH TRIPLET LOSS EMBEDDINGS	2022	Journal of Engineering Science and Technology
15	Mohan K.K.; Prasad Ch.R.; Kishore P.V.V.	Yolo V2 with bifold skip: A deep learning model for video based real time train bogie part identification and defect detection	2021	Journal of Engineering Science and Technology

16	Avinash P.; Vamsi B.K.; Srilakshmi T.; Kishore P.V.V.	Smart Control System for Smart City using IoT	2021	International Journal of Advanced Computer Science and Applications
17	Kiran Kumar E.; Kishore P.V.V.; Anil Kumar D.; Teja Kiran Kumar M.	Early estimation model for 3D-discrete indian sign language recognition using graph matching	2021	Journal of King Saud University - Computer and Information Sciences
18	Shaik A.A.; Mareedu V.D.P.; Polurie V.V.K.	Learning multiview deep features from skeletal sign language videos for recognition	2021	Turkish Journal of Electrical Engineering and Computer Sciences
19	Kumar M.T.K.; Kishore P.V.V.; Madhav B.T.P.; Kumar D.A.; Kala N.S.; Rao K.P.K.; Prasad B.	Can Skeletal Joint Positional Ordering Influence Action Recognition on Spectrally Graded CNNs: A Perspective on Achieving Joint Order Independent Learning	2021	IEEE Access
20	Suneetha M.; M.V.D. P.; P.V.V. K.	Multi-view motion modelled deep attention networks (M2DA-Net) for video based sign language recognition	2021	Journal of Visual Communication and Image Representation
21	Lakshmi M.L.S.N.S.; Madhav B.T.P.; Khan H.; Kishore P.V.V.	A frequency and pattern reconfigurable asymmetric ground antenna on flexible polyimide material for LTE, Wi-Fi, WLAN and fixed satellite applications	2020	Flexible and Printed Electronics
22	Prudhvi Nadh B.; Madhav B.T.P.; Siva Kumar M.; Anilkumar T.; Venkateswara Rao M.; Kishore P.V.V.	Windmill-shaped antenna with artificial magnetic conductor-backed structure for wearable medical applications	2020	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields
23	Aparna P.; Kishore P.V.V.	An iris biometric-based dual encryption technique for medical image in e-healthcare application	2020	International Journal of Computational Vision and Robotics
24	Srihari D.; Kishore P.V.V.	Multi Modal RGB D Action Recognition with CNN LSTM Ensemble Deep Network	2020	International Journal of Advanced Computer Science and Applications
25	Sasikala N.; Kishore P.V.V.	Train bogie part recognition with multi-object multi-template matching adaptive algorithm	2020	Journal of King Saud University - Computer and Information Sciences

26	Kumar E.K.; Kishore P.V.V.; Kiran Kumar M.T.; Kumar D.A.	3D sign language recognition with joint distance and angular coded color topographical descriptor on a 2 – stream CNN	2020	Neurocomputing
27	Aparna P.; Kishore P.V.V.	A Blind Medical Image Watermarking for Secure E-Healthcare Application Using Crypto-Watermarking System	2020	Journal of Intelligent Systems
28	Srihari D.; Kishore P.V.V.; Kumar E.K.; Kumar D.A.; Kumar M.T.K.; Prasad M.V.D.; Prasad C.R.	A four-stream ConvNet based on spatial and depth flow for human action classification using RGB-D data	2020	Multimedia Tools and Applications
29	Kishore P.V.V.; Perera D.G.; Kumar M.T.K.; Kumar D.A.; Kumar E.K.	A quad joint relational feature for 3D skeletal action recognition with circular CNNs	2020	Proceedings - IEEE International Symposium on Circuits and Systems
30	Vineetha K.V.; Kumar M.S.; Madhav B.T.P.; Rao M.V.; Kishore P.V.V.	SRR based tri-mode resonant microstrip bandpass filter for wlan applications	2020	Journal of Engineering Science and Technology
31	Krishnamohan K.; Prasad C.R.; Kishore P.V.V.	Successive texture and shape based active contours for train bogie part segmentation in rolling stock videos	2020	International Journal of Advanced Computer Science and Applications
32	Sastry A.S.C.S.; Geetesh S.; Sandeep A.; Vitru Varenya V.S.V.A.; Kishore P.V.V.; Anil Kumar D.; Kiran Kumar E.; Teja Kiran Kumar M.	Fusing spatio-temporal joint features for adequate skeleton based action recognition using global alignment kernel	2019	International Journal of Engineering and Advanced Technology
33	Kishore P.V.V.; Chaitanya K.B.N.S.K.; Shravani G.S.S.; Teja Kiran Kumar M.; Kiran Kumar E.; Anil Kumar D.	DSLR-net a depth based sign language recognition using two stream convents	2019	International Journal of Innovative Technology and Exploring Engineering
34	Aparna P.; Kishore P.V.V.	Biometric-based efficient medical image watermarking in E-healthcare application	2019	IET Image Processing

35	Sri Hari D.; Kishore P.V.V.; Siva Kumar M.; Teja Kiran Kumar M.; Kiran Kumar E.; Anil Kumar D.	Training granular convolution neural network with depth motion maps along with joint angular displacement maps for kinect based human action recognition	2019	Journal of Advanced Research in Dynamical and Control Systems
36	Prasad M.V.D.; Durga Bhavani K.; Tharun Kumar S.M.; Kishore P.V.V.; Teja Kiran Kumar M.; Kiran Kumar E.; Anil Kumar D.	Machine learning based 2D pose estimation model for human action recognition using geometrical maps	2019	International Journal of Innovative Technology and Exploring Engineering
37	Kumar D.A.; Sastry A.S.C.S.; Kishore P.V.V.; Kumar E.K.; Kumar M.T.K.	S3DRGF: Spatial 3-D relational geometric features for 3-D sign language representation and recognition	2019	IEEE Signal Processing Letters
38	Sasikala N.; Kishore P.V.V.; Kumar D.A.; Prasad C.R.	Localized region based active contours with a weakly supervised shape image for inhomogeneous video segmentation of train bogie parts in building an automated train rolling examination	2019	Multimedia Tools and Applications
39	Ravi S.; Suman M.; Kishore P.V.V.; Kumar E K.; Kumar M T.K.; Kumar D A.	Multi modal spatio temporal co-trained CNNs with single modal testing on RGB–D based sign language gesture recognition	2019	Journal of Computer Languages
40	Goutham E.N.D.; Vasamsetti S.; Kishore P.V.V.; Sardana H.K.	AUTOMATIC LOCALIZATION of LANDMARKS in CEPHALOMETRIC IMAGES Via MODIFIED U-Net	2019	2019 10th International Conference on Computing, Communication and Networking Technologies, ICCCNT 2019
41	Maddala T.K.K.; Kishore P.V.V.; Eepuri K.K.; Dande A.K.	YogaNet: 3-D Yoga Asana Recognition Using Joint Angular Displacement Maps with ConvNets	2019	IEEE Transactions on Multimedia
42	Kiran P.S.; Kumar D.A.; Kishore P.V.V.; Kumar K.E.; Kumar M.T.K.; Sastry A.S.C.S.	Investigation of 3-d relational geometric features for kernel-based 3-d sign language recognition	2019	Proceedings - 2019 IEEE International Conference on Intelligent Systems and Green Technology, ICISGT 2019
43	Vijaya Prasad K.; Kishore P.V.V.; Srinivasa Rao O.	Skeleton based view invariant human action recognition using convolutional neural networks	2019	International Journal of Recent Technology and Engineering

44	Ravi S.; Suman M.; Kishore P.V.V.; Kumar E.K.; Teja Kiran Kumar M.; Anil Kumar D.	Multi modal Rgb D data based Cnn training with uni modal Rgb data testing for real time sign language recognition	2019	International Journal of Recent Technology and Engineering
45	Sastry A.S.C.S.; Kishore A.R.; Raju C.B.; Kishore P.V.V.; Kumar D.A.; Kumar E.K.; Kumar M.T.K.	Depth based 3D indian sign language recognition using adaptive kernels	2019	International Journal of Innovative Technology and Exploring Engineering
46	Kumar E.K.; Kishore P.V.V.; Kumar M.T.K.; Kumar D.A.; Sastry A.S.C.S.	Three-Dimensional Sign Language Recognition with Angular Velocity Maps and Connived Feature ResNet	2018	IEEE Signal Processing Letters
47	Inthiyaz S.; Kishore P.V.V.; Madhav B.T.P.	Pre-informed level set for flower image segmentation	2018	Smart Innovation, Systems and Technologies
48	Sasikiran P.; Deekshitha A.; Kishore P.V.V.; Sindhu B.	DVR for identification and mitigating of voltage sags using estimation technique in power distribution systems	2018	Smart Innovation, Systems and Technologies
49	Kumar D.A.; Sastry A.S.C.S.; Kishore P.V.V.; Kumar E.K.	Indian sign language recognition using graph matching on 3D motion captured signs	2018	Multimedia Tools and Applications
50	Kishore P.V.V.; Kameswari P.S.; Niharika K.; Tanuja M.; Bindu M.; Kumar D.A.; Kumar E.K.; Kiran M.T.	Spatial Joint features for 3D human skeletal action recognition system using spatial graph kernels	2018	International Journal of Engineering and Technology(UAE)
51	Aparna P.; Kishore P.V.V.	An Efficient Medical Image Watermarking Technique in E-healthcare Application Using Hybridization of Compression and Cryptography Algorithm	2018	Journal of Intelligent Systems
52	Sastry A.S.C.S.; Kishore P.V.V.; Anil Kumar D.; Kiran Kumar E.	Sign language conversion tool (SLCTooL) between 30 World Sign Languages	2018	Smart Innovation, Systems and Technologies
53	Boddapati M.; Kishore P.	Bandwidth enhancement of CPW-fed elliptical curved antenna with square SRR	2018	International Journal of Intelligent Engineering and Systems
54	Sasikala N.; Kishore P.V.V.; Raghava Prasad Ch.; Kiran Kumar E.; Anil Kumar D.; Teja Kiran Kumar M.; Prasad M.V.D.	Unifying Boundary, Region, Shape into Level Sets for Touching Object Segmentation in Train Rolling Stock High Speed Video	2018	IEEE Access

55	Kiran Kumar E.; Kishore P.V.V.; Sastry A.S.C.S.; Anil Kumar D.	3D motion capture for Indian sign language recognition (SLR)	2018	Smart Innovation, Systems and Technologies
56	Inthiyaz S.; Madhav B.T.P.; Kishore P.V.V.	Flower image segmentation with PCA fused colored covariance and gabor texture features based level sets	2018	Ain Shams Engineering Journal
57	Kishore P.V.V.; Kumar K.V.V.; Kiran Kumar E.; Sastry A.S.C.S.; Teja Kiran M.; Anil Kumar D.; Prasad M.V.D.	Indian Classical Dance Action Identification and Classification with Convolutional Neural Networks	2018	Advances in Multimedia
58	Kishore P.V.V.; Kumar D.A.; Chandra Sekhara Sastry A.; Kumar E.K.	Motionlets Matching with Adaptive Kernels for 3-D Indian Sign Language Recognition	2018	IEEE Sensors Journal
59	Kumar K.V.V.; Kishore P.V.V.; Kumar D.A.; Kumar E.K.	Indian classical dance action identification using adaboost multiclass classifier on multifeature fusion	2018	2018 Conference on Signal Processing And Communication Engineering Systems, SPACES 2018
60	Rao G.A.; Kishore P.V.V.	Selfie sign language recognition with multiple features on adaboost multilabel multiclass classifier	2018	Journal of Engineering Science and Technology
61	Kumar K.V.V.; Kishore P.V.V.	Indian classical dance mudra classification using HOG features and SVM classifier	2018	Smart Innovation, Systems and Technologies
62	Kishore P.V.V.; Azma S.; Gayathri K.; Sastry A.S.C.S.; Kiran Kumar E.; Anil Kumar D.	SWIFT cognitive behavioral assessment model built on cognitive analytics of empirical mode internet of things	2018	International Journal of Engineering and Technology(UAE)
63	Anantha Rao G.; Kishore P.V.V.; Sastry A.S.C.S.; Anil Kumar D.; Kiran Kumar E.	Selfie continuous sign language recognition with neural network classifier	2018	Lecture Notes in Electrical Engineering
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