University College Of Engineering, Panruti

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Panruti - 607 106

Literature Survey

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S.No	TITLE	AUTHOR(S)	TECHNIQUE(S)	YEAR	ADVANTAGE	DISADVANTAGES
1	Face Detection and recognition using OpenCV	Ramadan TH. Hasan, Amira Bibo Sallow	OpenCV, Face Detection, YOLO, Object Detection, Eigenfaces, Faster R-CNN, Fisherfaces	2021	YOLO is the most recent real-time object detection system that uses a single Neural Network to process the entire image. The SSD method is focused on the feed-forward convolutional network that generates a permanent border-box array and results in the existence of class-based entity instances in these boxes and a non-maximum deletion stage to generate final detection.	The Expected result is not always 100%.
2	Real Time Object Detection and Tracking Using Deep Learning and OpenCV	Chandan G, Ayush Jain, Harsh Jain, Mohana	Region-Based Convolution Neural Networks (RCNN), Single Shot, Detector, You Only Look Once (YOLO).	2018	Objects are detected using SSD algorithm in real time scenarios.SSD have shown results with considerable confidence level.This model showed excellent detection and tracking results on the object trained and can further utilized in specific scenarios to detect, track and respond to the particular targeted objects in the video surveillance	For making this system large amount of data is collected. And for making real time tracking high performanced GPU is required.
3	Air canvas applications using OpenCV and Numpy in python	Prof.S.U.Saoji, Nishtha Dua, Akash Kumar Choudhary, Barat Phogat	Air Writing, Charater Recoginition, Object Detection, Real-Time Gesture Control System, Smart Wearables, CV.	2021	The system will be an excellent software for smart wearables using which people could better interact with the digital world.	Using a handwriting recognizer in place of a character recognizer will allow the user to write word by word, making writing faster. Hand-gestures with a pause can be used to control the real-time system as done by instead of using the number of fingertips. Our system sometimes recognizes fingertips in the background and changes their state.
4	Two Naive Algotithm for hand tracking ang gesture recoginition.	Hrushikesh, Sri Vasthav Reddy, Shravalika, Sushmitha, Md Shabbeer.	OpenCV, AI, Hand Gesture Recoginition.	2022	Human–machine interaction (HMI) refers to the communication and interaction between a human and a machine via a user interface. This can be used to effectively and efficiently recognize and track hands and recognize hand gestures which can then be used to control computers by assigning different simple commands to different gestures.	Detecting and processing the image and also landmark the region of hand difficult to acheive
5	Hand Gesture Recognition using OpenCV and Python.	Harini V, Prahelika V, Sneha I, Adline Ebenzer P.	Histogram, Background Cancellation, Contours and Convex Hull.	2020	Histogram based approach is used to separate out the hand from the background image. Background cancellation techniques are used to produce optimum results. The detector hand is then processed and modelled by finding contours and convex hull to recognize finger and palm positions and dimensions.	Hand colour must be slightly distinguished with background, if not then histogram will not differentiate and result will not shows.

6	Gesture for pictuer for achiving and communication systems	Naveen Madapana, Glebys Gonzalez, Richard Rodgers, Lingsong Zhang, Juan P Wachs.	Picture for Achiving and Communication Systems (PACS).	2018	Gesture based tool which uses PACS that have high level recommened among surgeon,It is better than using gestures based on authoritarian or arbitrary approaches.	Its cost, the need for specialized personnel for its installation and maintenance, training of users, the possibility of breakdown, and data security issues.
7	Human Computer Interaction - Hand Gesture Recognition.	Riya Jain, Muskan Jain, Roopal Jain, Suman Madan.	Human Computer Interaction (HCI)	2021	The algorithm is independent of user characteristics. It does not require any kind of training of sample data. The proposed Implemented algorithm has been tested on 390 images, gives a recognition rate of approximately 92% and average elapsed time of 2.76 sec.	Poor user interfaces and experiences can change technology from a useful tool to a frustrating waste of time. Productivity suffers when workers have to spend their time working around designs that are counterintuitive and processes that are convoluted.
8	HybridSN: Exploring 3-D–2-D CNN Feature Hierarchy for Hyperspectral Image Classification	Swalpa Kumar Roy, Gopal Krishna, Shiv Ram Dubey, Bidyut B. Chaudhuri.	2-D-convolutional neural network (CNN), 3-D-CNN, deep learning, CNNs, hybrid spectral CNN (HybridSN), hyperspectral image (HSI) classification, remote sensing, spectral–spatial.	2020	Hyperspectral image (HSI) classification is widely used for the analysis of remotely sensed images. This letter has introduced a hybrid 3-D and 2-D model for HSI classification	The proposed Hybrid SN is based on the hierarchical representation of spectral–spatial 3-D-CNN followed by a spatial 2-D-CNN, which are complementary to each other. It is also observed from these results that the performance of 3-D-CNN is poor than 2-D-CNN over SA data set.
9	The Potential of Gesture based Interaction	Kaster Rise, Ole Andres Alsos.	VR, AR, Gesture Based interaction.	2020	Gesture based interfaces allow human computer interaction to be in a natural and intuitive manner. The most important advantage of the usage of hand gesture based input modes is that using this method the user can interact with the application from a distance without any physical interaction with the keyboard or mouse	For image-based gesture recognition, there are limitations on the equipment used and image noise. Images or video may not be under consistent lighting, or in the same location. Items in the background or distinct features of the users may make recognition more difficult.
10	Gesture Controlled image system positioning for minimally invasive interventions.	Benjamin Fritsch, Thomas Hoffmann, Andre Mewes, Georg Rose.	Computer Tomography, C-Arm CT, Radiography.	2021	The rotation gesture feels normal. The usage of this system is easy	Errors where occurred when performing the confirmation gestures. The sequence was not optimal, because the participants were often confused and used the activation gesture again to confirm instead of the correct confirmation gesture.