LITERATURE SURVEY

1. Roy Amante A. Salvador and Prospero C. Naval, Jr., "Towards a Feasible Hand Gesture Recognition System as Sterile Non-contact Interface in the Operating Room with 3D Convolutional Neural Network", Informatica, volume: 46, issue: 1, pp: 1-12, 2022.

Description:

In this paper, they proposed a Deep Computer Vision-based Hand Gesture Recognition framework to facilitate the interaction. They trained a 3D Convolutional Neural Network (CNN) with a very large scale dataset to classify hand gestures robustly.

2. Rutika Mhatre, Bhakti Dhage, Vishesh Kwatra ,and Pallavi Chavan, "Hand gesture based X-ray image controlling using Convolutional Neural Network", ICACC, 2022.

Description:

They proposes a novel computer vision based system that allows doctors, surgeons and other physicians to control X-Ray images just by using simple gestures thus eliminating the need of traditional devices like mouse and keyboard. They help reduce the risk of contamination in sterile environments like those found in the hospitals and it will also help in preventing the spread of COVID by not allowing contact with contaminated surfaces. It is implemented using CNN model.

3. Mithun George Jacob, Juan Pablo Wachs, Rebecca A Packer, "Hand-gesture-based sterile interface for the operating room using contextual cues for the navigation of radiological images", J Am Med Inform Assoc, pp: e183-e186, 2013.

Description:

They presents a method to improve the navigation and manipulation of radiological images through a sterile hand gesture recognition interface based on attentional contextual cues. Computer vision algorithms were developed to extract intention and attention cues from the surgeon's behavior and combine them with sensory data from a commodity depth camera.

4. Jianing Li, Shiliang Zhang, Tjejun Huang, “Multi-Scale 3D Convolution Network for Video Based Person Re-Idntification”, The Thirty-Third AAAI Conference on Artifical Intelligence(AAAI-19)

Description:

This paper proposes a two-stream convolution network to extract spatial and temporal cues for video based person Re-Identification (ReID). A temporal stream in this network is constructed by inserting several Multi-scale 3D (M3D) con volution layers into a 2D CNN network. The resulting M3D convolution network introduces a fraction of parameters into the 2D CNN, but gains the ability of multi-scale temporal feature learning.

5. M. Jacob, J. Wachs, R. Packer, “Hand-gesture-based sterile interface for the operating room using contextual cues for the navigation of radiological images.” , Journal of the American Medical Informatics Association, June 2013

Description:

This paper presents a method to improve the navigation and manipulation of radiological images through a sterile hand gesture recognition interface based on attentional contextual cues.

6. A. Mewes, B. Hensen, C. Hansen, “Touchless interaction with software in interventional radiology and surgery: a systematic literature review”, International Journal of Computer Assisted Radiology and Surgery, 2017

Description:

This paper main challenges for future research are the improvement and evaluation of usability and intuitiveness of touchless human-computer interaction and the full integration into productive systems as well as the reduction of necessary interaction steps and further development of hands-free interaction.